

BASE-LINE
2nd Half, 1988

**CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR
JUL-AUG, SEP-OCT, NOV-DEC, 1988)**

Project 2694-1

**Report One-Hundred Four
A Progress Report
to
FOURDRINIER KRAFT BOARD GROUP
OF THE
AMERICAN PAPER INSTITUTE**

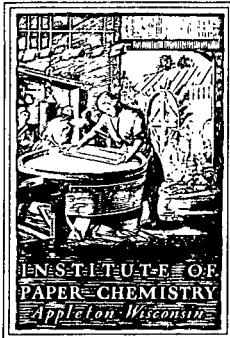
March 1, 1989

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March 1, 1989

Project 2694-1

Library

Dear Sir:

We are enclosing a copy of the following report to the Fourdrinier Kraft Board Group of the American Paper Institute:

Report One-Hundred Four, Project 2694-1 a progress report entitled, "Continuous Baseline Study (Modified); Mill Linerboard Data for July-August, September-October, November-December, 1988" dated March 1, 1989.

The code identities for paper machines in your company from which data were submitted for evaluation are given on the inside of the front cover of this report.

Sincerely,

Roger H. Van Eperen

Roger H. Van Eperen
Research Associate
Paper Materials Division

RHV/les
Enclosure

GEORGIA-PACIFIC CORP.
Your machines are identified
in this report by the
following codes.

Monticello	Machine #1	N2
Monticello	#2	X1

Toledo	#1	U3
Toledo	#3	N4

BASE-LINE
2nd HALF, 1988

THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR JUL-AUG, SEP-OCT, NOV-DEC, 1988)

Project 2694-1

Report One-Hundred Four

A Progress Report

to

FOURDRINIER KRAFT BOARD GROUP

OF THE

AMERICAN PAPER INSTITUTE

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March 1, 1989

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THE INSTITUTE OF PAPER CHEMISTRY

Appleton, Wisconsin

CONTINUOUS BASE-LINE STUDY (MODIFIED)
(MILL LINERBOARD DATA FOR JUL-AUG, SEP-OCT, NOV-DEC, 1988)

SUMMARY

PART I: SUMMARY OF MOISTURE CONTENT DATA
(JUL-DEC, 1988)

Linerboard Grade Wt.	Moisture Content, %			
		JUL-AUG	SEP-OCT	NOV-DEC
26 Lb	Max.	7.2	7.0	6.9
	Min.	3.7	3.7	4.5
	Ave.	5.6(16)	5.3(16)	5.4(14)
33 Lb	Max.	7.6	7.1	7.0
	Min.	4.2	4.2	4.2
	Ave.	5.7(27)	5.6(29)	5.5(26)
38 Lb	Max.	7.4	6.9	6.7
	Min.	5.4	5.0	4.9
	Ave.	5.9(18)	5.8(20)	5.9(18)
42 Lb	Max.	7.7	7.3	7.0
	Min.	5.2	3.6	4.8
	Ave.	6.0(45)	5.8(45)	5.9(43)
69 Lb	Max.	7.8	7.5	7.7
	Min.	5.4	5.6	5.4
	Ave.	6.4(29)	6.4(30)	6.4(27)
90 Lb	Max.	8.4	8.3	8.2
	Min.	6.0	5.7	5.5
	Ave.	6.8(11)	6.6(13)	6.7(13)

Max. and Min. values are current machine averages.

Ave. value is current F.K.B.G. average, number of machines is indicated in parentheses.

PART II: SUMMARY OF ADJUSTED BASIS WEIGHT DATA
(JUL-DEC, 1988)

		Adjusted Basis Weight, lb/M sq ft		
Linerboard Grade Wt.		JUL-AUG	SEP-OCT	NOV-DEC
26 Lb	Max.	26.7	26.8	27.0
	Min.	25.7	25.7	25.7
	Ave.	26.2(16)	26.2(16)	26.2(15)
33 Lb	Max.	34.2	35.4	35.8
	Min.	32.7	32.8	32.0
	Ave.	33.3(27)	33.4(29)	33.4(27)
38 Lb	Max.	40.4	42.2	39.5
	Min.	38.0	37.5	37.7
	Ave.	38.5(18)	38.6(20)	38.4(19)
42 Lb	Max.	43.1	43.8	43.4
	Min.	41.8	41.3	41.3
	Ave.	42.3(45)	42.4(45)	42.4(44)
69 Lb	Max.	70.9	70.6	70.8
	Min.	68.3	68.2	68.5
	Ave.	69.4(29)	69.4(30)	69.5(28)
90 Lb	Max.	92.0	91.6	91.6
	Min.	89.3	89.3	88.9
	Ave.	90.4(11)	90.5(13)	90.5(13)

Max. and Min. values are current machine averages.

Ave. value is current F.K.B.G. average, number of machines is indicated in parentheses.

PART III: SUMMARY OF CALIPER DATA
(JUL-DEC, 1988)

Linerboard Grade Wt.	Caliper, mil			
	JUL-AUG	SEP-OCT	NOV-DEC	
26 Lb	Max.	3.6	8.6	8.3
	Min.	6.8	7.1	7.3
	Ave.	7.7(16)	7.9(16)	7.7(15)
33 Lb	Max.	10.5	10.9	10.6
	Min.	8.7	8.3	8.9
	Ave.	9.6(27)	9.6(29)	9.6(27)
38 Lb	Max.	11.5	11.8	11.6
	Min.	9.4	10.1	9.8
	Ave.	10.7(18)	10.8(19)	10.6(19)
42 Lb	Max.	12.8	12.9	12.9
	Min.	10.4	10.5	10.6
	Ave.	11.7(45)	11.8(45)	11.7(44)
69 Lb	Max.	20.3	20.3	20.5
	Min.	17.0	17.3	17.4
	Ave.	19.1(29)	19.1(30)	19.0(28)
90 Lb	Max.	27.0	26.5	27.4
	Min.	24.0	23.8	23.8
	Ave.	25.2(11)	25.2(13)	25.4(13)

Max. and Min. values are current machine averages.

Ave. value is current F.K.B.G. average, number of machines is indicated in parentheses.

PART IV: SUMMARY OF BURSTING STRENGTH DATA
(JUL-DEC, 1988)

Linerboard Grade Wt.	Bursting Strength, psig		
	JUL-AUG	SEP-OCT	NOV-DEC
26 Lb	Max.	83	88
	Min.	63	65
	Ave.	73(16)	73(16)
33 Lb	Max.	100	106
	Min.	75	78
	Ave.	86(27)	88(27)
38 Lb	Max.	113	116
	Min.	88	92
	Ave.	100(18)	101(19)
42 Lb	Max.	124	125
	Min.	98	98
	Ave.	107(45)	107(44)
69 Lb	Max.	161	167
	Min.	130	133
	Ave.	145(29)	145(28)
90 Lb	Max.	192	198
	Min.	152	153
	Ave.	175(11)	176(13)

Max. and Min. values are current machine averages.

Ave. value is current F.K.B.G. average, number of machines is indicated in parentheses.

PART V: SUMMARY OF CD RING CRUSH DATA
(JUL-DEC, 1988)

Linerboard Grade Wt.	CD Ring Crush, Lb		
	JUL-AUG	SEP-OCT	NOV-DEC
26 Lb	Max. 44.0	44.0	53.0
	Min. 35.0	32.0	33.0
	Ave. 38.4(7)	38.4(8)	39.5(9)
33 Lb	Max. 71.6	70.0	72.6
	Min. 43.0	42.0	46.0
	Ave. 55.9(14)	56.3(15)	57.1(15)
38 Lb	Max. 86.4	87.9	84.8
	Min. 52.0	59.0	58.0
	Ave. 70.3(13)	70.7(13)	69.2(13)
42 Lb	Max. 93.6	103.1	105.0
	Min. 61.0	66.0	65.0
	Ave. 77.5(24)	78.6(24)	80.2(23)
69 Lb	Max. 159.8	154.4	151.7
	Min. 106.0	105.0	109.0
	Ave. 124.1(15)	126.9(16)	126.6(16)
90 Lb	Max. 163.0	196.1	203.8
	Min. 137.0	145.0	135.0
	Ave. 152.2(5)	167.1(7)	167.0(8)

Max. and Min. values are current machine averages.

Ave. value is current F.K.B.G. average, number of machines is indicated in parentheses.

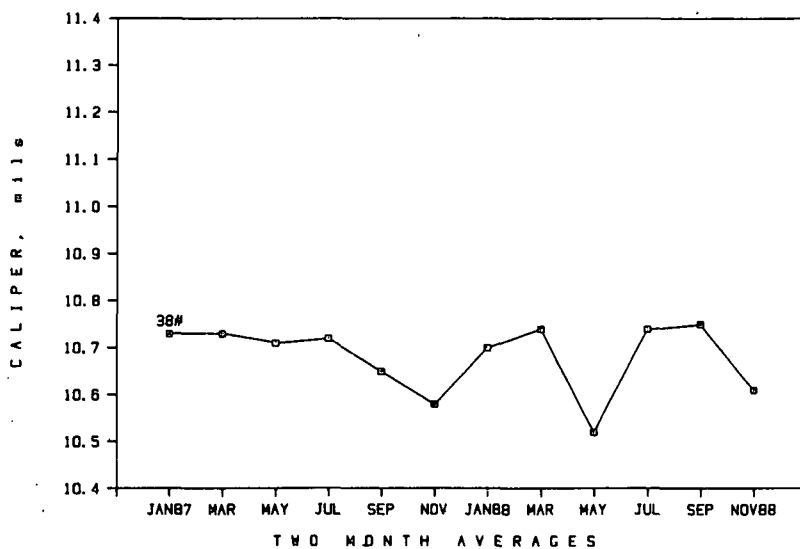
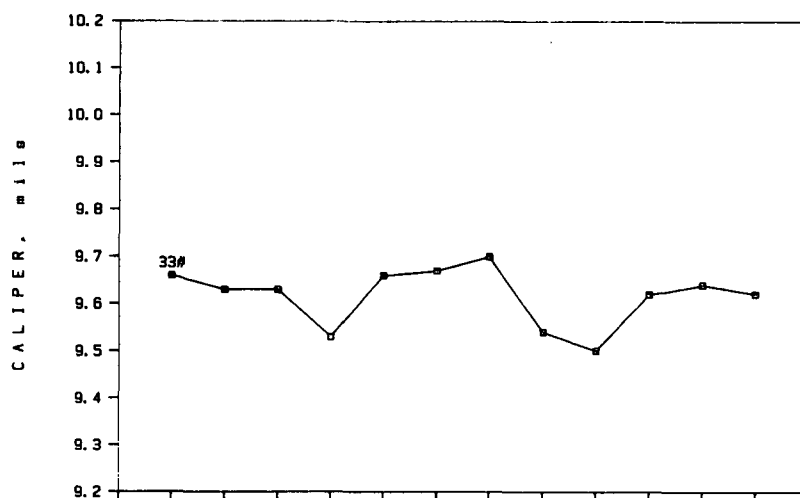
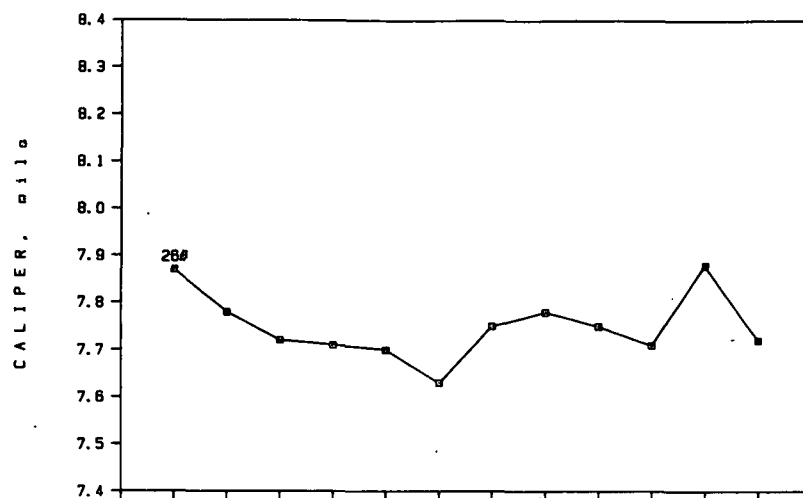
PART VI: SUMMARY OF CD STFI DATA
(JUL-DEC, 1983)

Linerboard Grade Wt.	CD STFI, lb/in		
	JUL-AUG	SEP-OCT	NOV-DEC
26 Lb	Max.	14.3	14.2
	Min.	10.3	10.4
	Ave.	12.2(8)	12.6(8)
33 Lb	Max.	20.4	17.3
	Min.	11.9	12.5
	Ave.	16.1(13)	15.4(13)
38 Lb	Max.	21.7	21.2
	Min.	15.0	17.8
	Ave.	18.5(7)	19.0(7)
42 Lb	Max.	24.1	23.0
	Min.	16.3	16.4
	Ave.	20.4(24)	19.9(22)
69 Lb	Max.	36.6	35.0
	Min.	26.4	27.0
	Ave.	31.4(14)	30.4(13)
90 Lb	Max.	41.9	42.0
	Min.	39.3	37.6
	Ave.	40.8(5)	40.5(5)

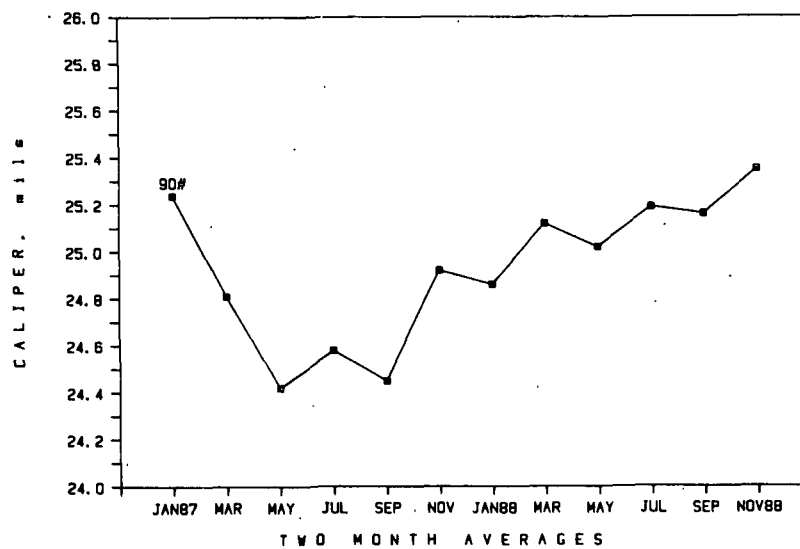
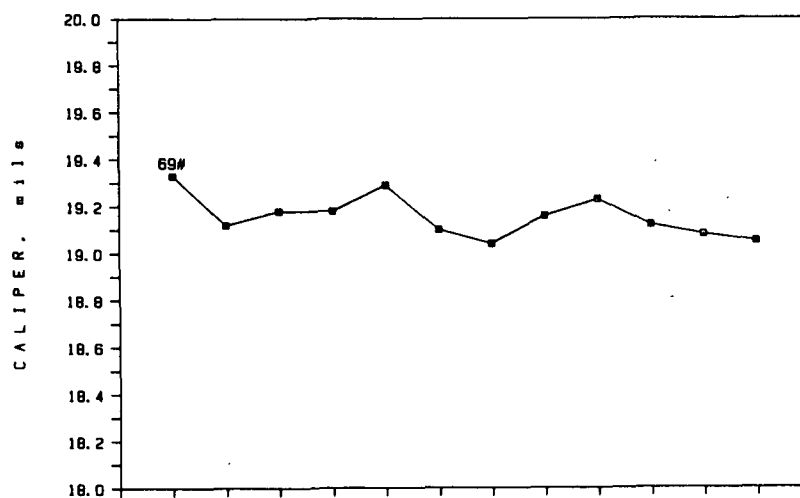
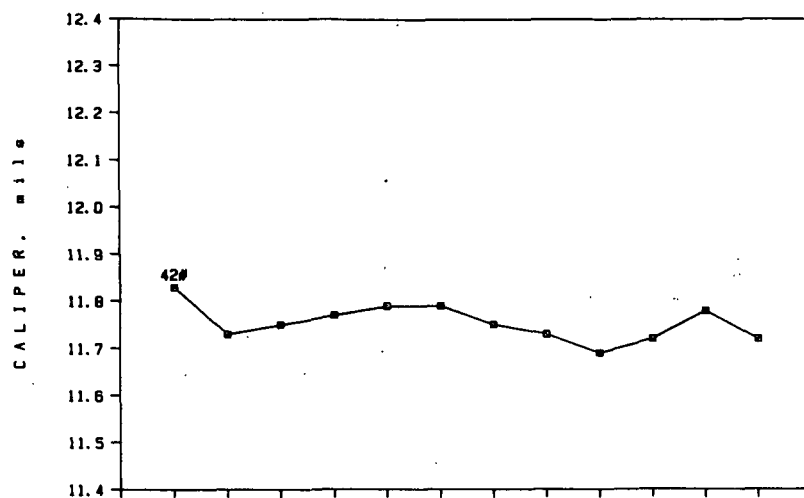
Max. and Min. values are current machine averages.

Ave. value is current F.K.B.G. average, number of machines is indicated in parentheses.

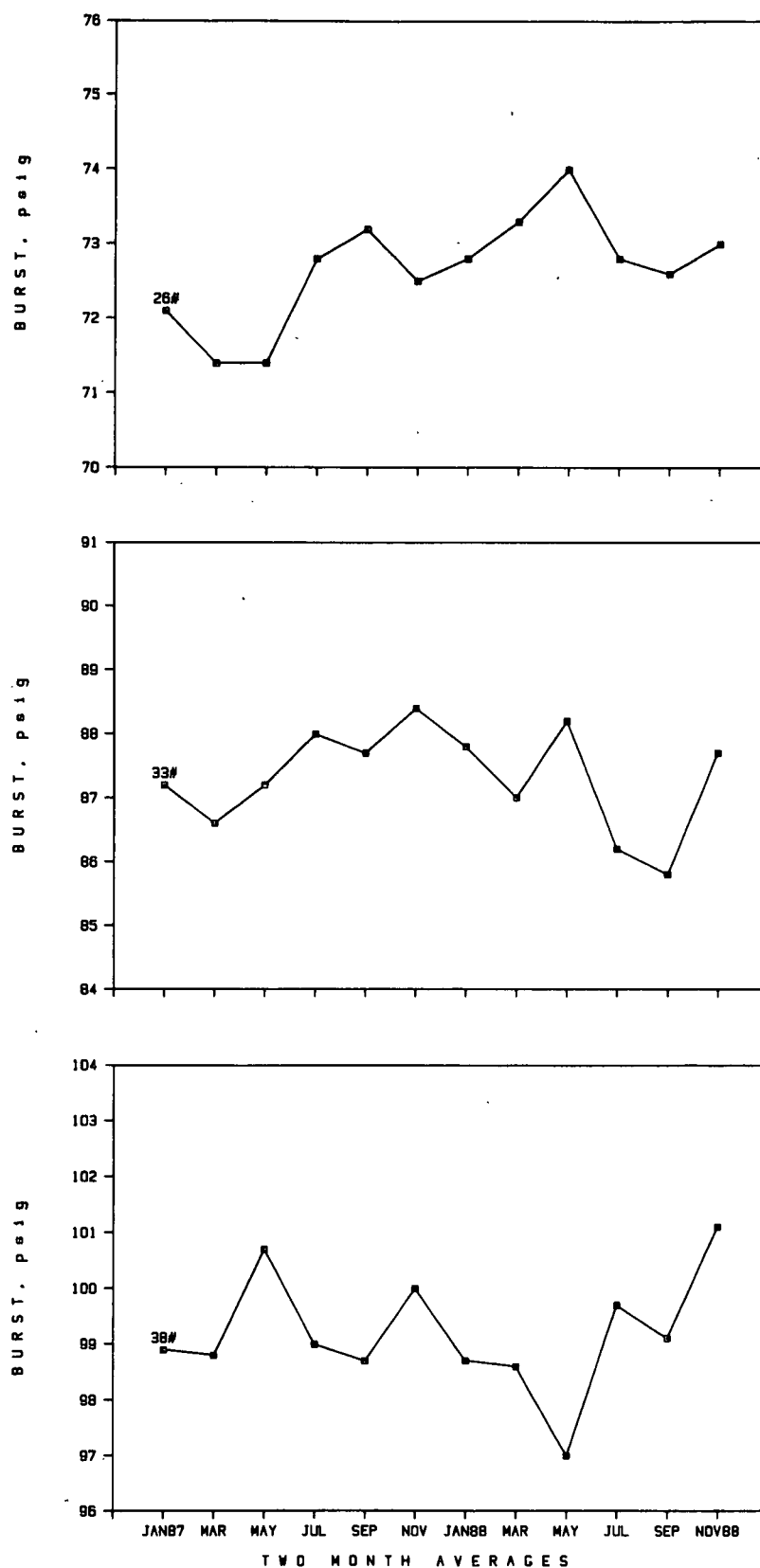
TWO YEAR TREND PLOT FOR CALIPER



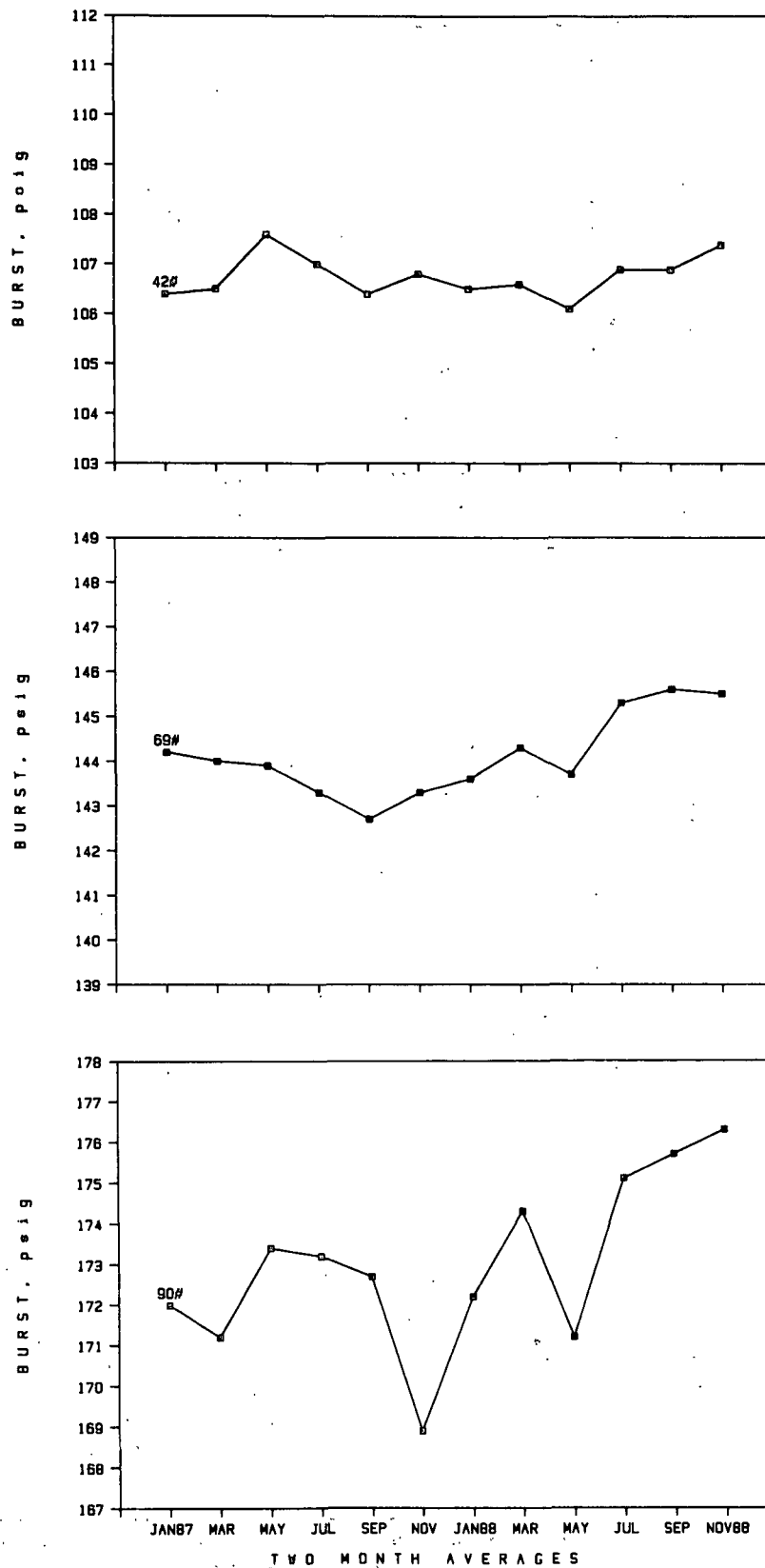
TWO YEAR TREND PLOT FOR CALIPER



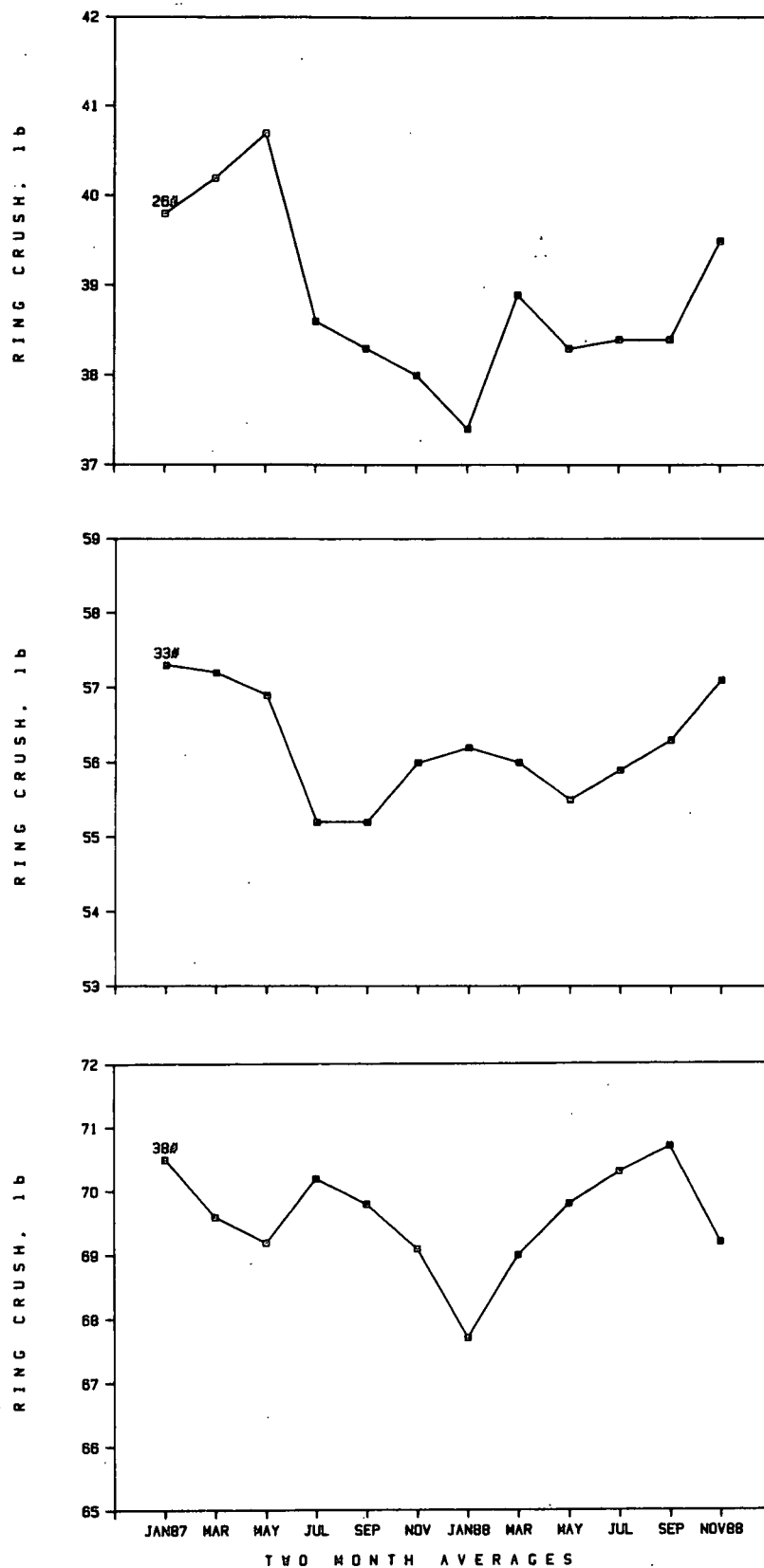
TWO YEAR TREND PLOT FOR BURST



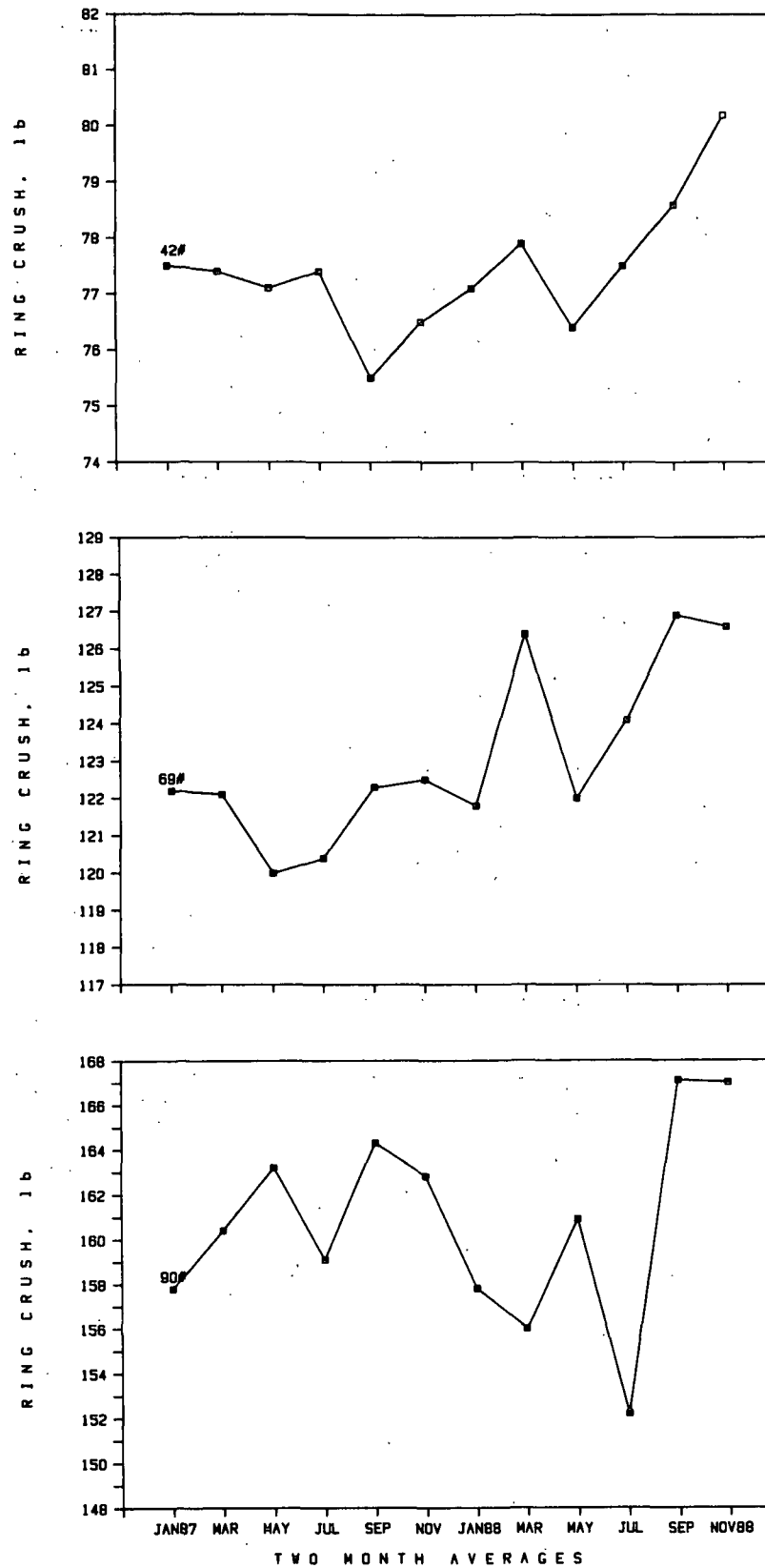
TWO YEAR TREND PLOT FOR BURST



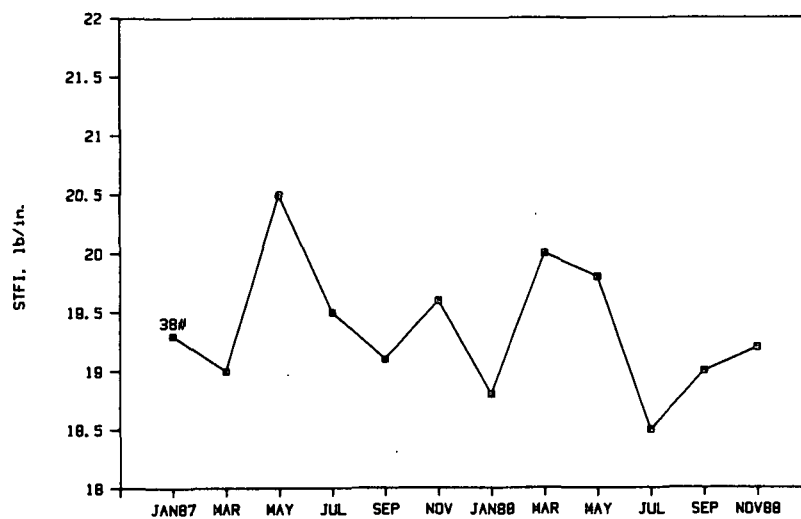
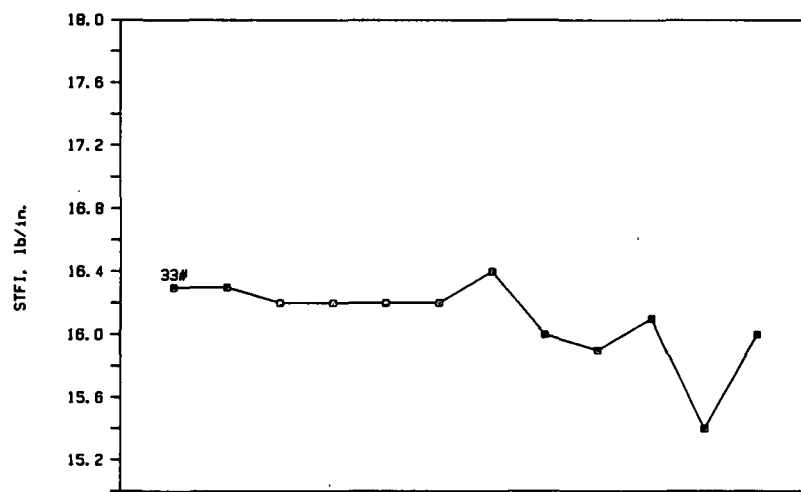
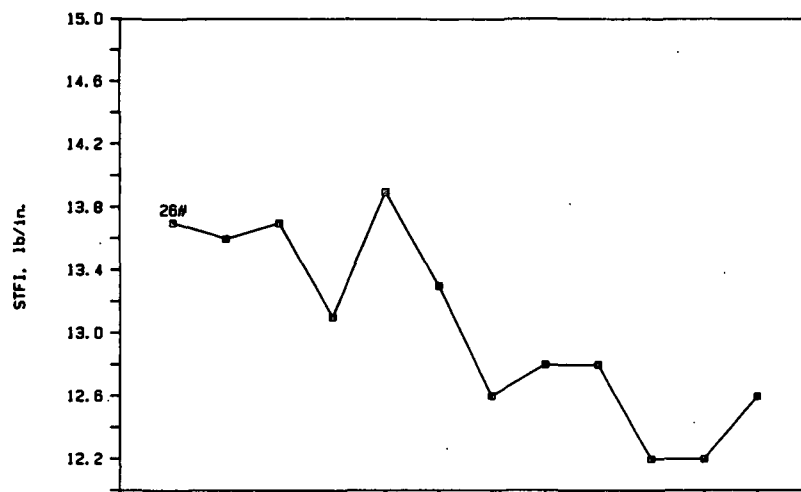
TWO YEAR TREND PLOT FOR CD RING CRUSH



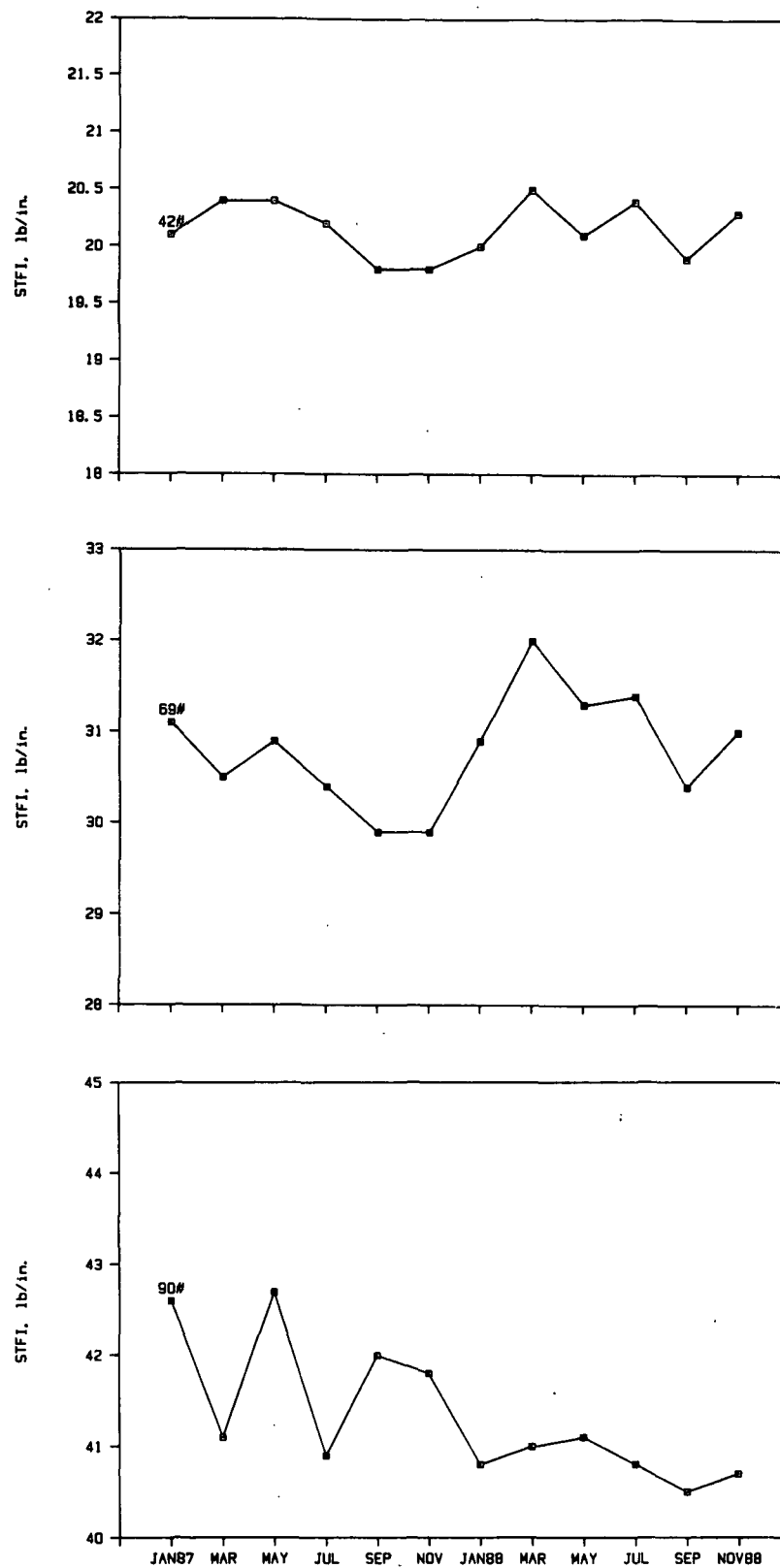
TWO YEAR TREND PLOT FOR CD RING CRUSH



TWO YEAR TREND PLOT FOR CD STF1



TWO YEAR TREND PLOT FOR CD STFI



INTRODUCTION

The continuous base-line study (modified) is a compilation of bimonthly averages of mill test data obtained routinely on six major grade weights of linerboard manufactured in the member mills of F.K.B.G. Mill data are included for moisture content, basis weight, caliper, bursting strength, C.D. ring crush and C.D. STFI tests made on the production of individual machines which produced at least 500 tons of one or more of the following six major grade weights during a given period: 26, 33, 38, 42, 69, and 90 lb. Participating mills are asked to report reel moisture content, basis weight, and moisture content corresponding to the basis weight measurement. The latter two measurements are used to compute the adjusted basis weight corresponding to a moisture content of 7.8%. Only the reel moisture content and the adjusted basis weight are included in the report.

PRESENTATION OF DATA

For the six major grade weights of linerboard referred to earlier, mill test averages for moisture content, adjusted basis weight, caliper, bursting strength, C.D. ring crush, and C.D. STFI are compiled in the following tables.

Table Number	Description
I-II-III	Mill Test Averages on 26-lb Linerboard
IV-V-VI	Mill Test Averages on 33-lb Linerboard
VII-VIII-IX	Mill Test Averages on 38-lb Linerboard
X-XI-XII	Mill Test Averages on 42-lb Linerboard
XIII-XIV-XV	Mill Test Averages on 69-lb Linerboard
XVI-XVII-XVIII	Mill Test Averages on 90-lb Linerboard

TABLE I

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 26 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	CUM. AV.	IND. *B	LB/M SQ FT	IND. *B		MIL	CUM. AV.	IND. *B
A1	5.3	5.4	100.0	25.7	25.8	98.1	7.0	7.2	90.9
F1	4.7	4.9	85.4	26.3	26.4	100.4	7.8	7.3	101.3
A2	7.2	6.9	130.9	26.2	25.9	100.0	8.6	8.4	111.7
F2	5.0	5.0		26.1	26.1		7.8	7.8	
K2	5.4	5.2	98.2	26.1	26.3	99.6	7.2	7.4	93.5
L2	5.5	5.6	100.0	26.2	26.3	100.0	7.3	8.0	94.8
M2	5.3	6.1		26.1	26.2		7.9	8.3	
V2	4.9	5.5	96.4	26.0	26.1	99.6	7.7	7.8	102.6
C3	5.1	4.9	92.7	26.3	26.4	100.4	7.2	7.7	93.5
J3	3.7	3.6	67.3	26.3	26.4	100.4	8.3	8.3	107.8
K3	5.2	5.2	94.5	26.7	26.7	101.9	7.5	7.6	97.4
S3	7.2	7.1	130.9	26.1	26.0	99.6	8.3	8.3	107.8
E4	6.9	7.0	125.4	26.0	26.0	99.2	7.4	7.7	96.1
N4	5.6	5.6	101.8	25.9	25.9	98.8	8.1	8.2	105.2
Q4	6.6	6.2	120.0	26.0	26.1	99.2	6.3	6.7	88.3
R4	6.0	6.0	109.1	26.4	26.3	100.8	7.6	7.7	98.7
T4	4.2	4.6	76.4	26.4	26.4	100.8	8.4	8.3	109.1
FKBG	5.6	5.5	101.8	26.2	26.2	100.0	7.7	7.7	100.0

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE I (CONT)

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 26 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST		IND. *B	CD RING		IND. *B	CD STFI		IND. *B
		PSIG CUM. AV.	PSIG CUM. AV.		CRUSH, LB CUM. AV.	CRUSH, LB CUM. AV.		LB/IN CUM. AV.	LB/IN CUM. AV.	
A1	72	76	76	98.6						
F1	73	77	77	100.0						
A2	71	72	72	97.3	44.0	43.5	115.2	14.3	14.8	109.2
F2		71	71			33.0		14.0	14.9	106.9
K2	66	67	67	90.4	38.0	42.3	99.5	10.6	11.3	80.9
								13.0		
L2	79	70	70	108.2	35.0	37.5	91.6			
M2		70	70			36.3				
N2	80	78	78	109.6	43.0	41.2	112.6			
V2	70	72	72	95.9	37.0	34.3	96.8	12.6	12.6	96.2
C3	63	69	69	93.2						
J3	75	78	78	102.7						
K3	83	84	84	113.7				10.3	10.9	78.6
S3	70	69	69	95.9				12.7	12.0	96.9
E4	70	67	67	95.9				10.5	11.6	80.2
M4	71	71	71	97.3	36.0	37.3	94.2			
O4	76	73	73	104.1				12.6	12.4	96.2
A4	77	77	77	105.5	36.0	37.5	94.2			
T4	63	70	70	86.3				14.6		
FK3G	73	73	73	100.0	38.4	39.2	100.5	12.2	13.1	93.1

NOTE 3 IS GIVEN IN APPENDIX.

TABLE II

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 26 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. PERCENT AV.	CUM. PERCENT AV.	IND. *B	CUR. LB/M SQ AV.	CUM. LB/M SQ AV.	IND. *B	CUR. MIL AV.	CUM. MIL AV.	IND. *B
A1	5.2	5.4	92.8	25.7	25.8	98.1	7.1	7.1	92.2
F1	4.6	4.9	82.1	26.2	26.4	100.0	7.4	7.3	96.1
A2	7.0	7.0	125.0	26.1	26.0	99.6	8.6	8.4	111.7
F2	4.7	5.0	87.5	26.1	26.1	99.6	8.0	7.8	103.9
K2	5.4	5.2	96.4	26.4	26.3	100.8	7.4	7.4	96.1
L2	5.4	5.6	96.4	26.3	26.2	100.4	7.9	7.8	102.6
M2		6.1			26.2			8.3	
N2	5.2	5.4	92.8	26.1	26.1	99.6	8.1	7.8	105.2
V2	4.9	5.0	87.5	26.0	26.1	99.2	7.9	7.7	102.6
C3	4.9	4.9	87.5	26.5	26.4	101.1	7.6	7.6	98.7
J3	3.7	3.6	66.1	26.1	26.4	99.6	8.5	8.3	110.4
K3	5.2	5.2	92.8	26.8	26.7	102.3	7.6	7.6	98.7
S3	6.3	7.1	121.4	26.1	26.0	99.6	8.4	8.3	109.1
E4		7.0			26.0			7.6	
N4	5.5	5.6	98.2	25.9	25.9	98.8	8.3	8.2	107.8
O4	6.0	6.2	107.1	26.0	26.1	99.2	7.1	6.7	92.2
Q4	6.0	6.0	107.1	26.4	26.4	100.8	7.8	7.7	101.1
T4	4.0	4.4	71.4	26.4	26.4	100.8	8.3	8.3	107.8
FKB6	5.3	5.6	94.6	26.2	26.2	100.0	7.9	7.7	102.6

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE II (CONT)

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 26 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST			CD RING			CD STFI		
		PSIG CUM. AV.	IND. *B		CRUSH, LB CUM. AV.	IND. *B		LB/IN CUM. AV.	IND. *B	
A1	77	75	105.5					14.2	14.7	110.1
F1	74	76	101.4		44.0	43.6	115.2	14.0	14.7	108.5
A2	71	72	97.3					11.3	11.1	85.3
F2	68	71	93.2		32.0	33.0	83.8	12.3	13.0	95.3
K2	65	66	89.0		42.6	41.4	111.5			
L2	74	72	101.4		35.0	36.3	91.6			
M2		70				36.4				
W2	82	78	112.3		42.0	41.5	109.9			
V2	71	72	97.3		38.0	35.2	99.5	11.6	12.7	89.9
C3	63	69	93.2							
J3	72	79	98.6					10.4	10.9	80.6
K3	88	35	120.5					12.7	12.2	98.4
S3	71	70	97.3							
E4		68						11.4		
N4	69	71	94.5		36.0	37.0	94.2			
O4	66	74	90.4					11.8	12.5	91.5
Q4	74	77	101.4		33.0	37.2	99.5			
T4	72	68	98.6					14.6		
FK3G	73	73	100.0		38.4	38.2	100.5	12.2	12.9	94.6

NOTE B IS GIVEN IN APPENDIX.

TABLE III

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 26 LG KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	CUM. AV.	IND. *B	LG/IN SQ FT	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	CUM. AV.
A1	5.6	5.4	101.3	25.3	25.8	98.5	7.4	7.2	94.9
F1	4.5	4.9	83.6	26.2	26.4	100.0	7.5	7.4	96.2
A2		7.0			26.0			8.5	
F2	4.9	5.0	89.1	26.1	26.1	99.6	7.9	7.9	101.3
K2	5.3	5.2	96.4	26.2	26.3	100.0	7.3	7.4	93.6
L2	5.3	5.6	96.4	26.1	26.2	99.6	7.9	7.8	101.3
M2		6.1			26.2			8.3	
V2	5.3	5.4	96.4	26.1	26.1	99.6	8.0	7.9	102.5
V2	5.0	4.9	90.9	26.2	26.0	100.0	7.4	7.7	94.9
Z2	5.5		100.0	27.0		103.0	7.4		94.9
C3	4.9	4.9	89.1	26.1	26.4	99.6	7.6	7.6	97.4
J3		3.6			26.3			8.4	
K3	4.5	5.3	81.8	26.9	26.7	102.7	7.3	7.6	100.0
S3	6.9	7.1	125.4	26.1	26.0	99.6	8.2	8.3	105.1
E4	6.3	6.9	123.6	25.9	26.0	93.8	7.3	7.6	100.0
N4	5.6	5.5	101.3	25.7	25.9	98.1	8.3	8.2	106.4
O4	6.2	6.2	112.7	26.2	26.1	100.0	7.7	6.7	98.7
Q4		6.0		26.4	26.4	100.8	7.6	7.7	97.4
T4		4.3			26.4			8.3	
FK3G	5.4	5.5	98.2	26.2	26.2	100.0	7.7	7.8	98.7

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE III (CONT)

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 26 LB KRAFT LINERBOARD

CODE	BURST		CD RING			CD STFI		
	CUR. AV.	PSIG CUM. AV.	IND. *B	CUR. AV.	CRUSH, LB CUM. AV.	IND. *B	CUR. AV.	LB/IN CUM. AV.
A1	76	74	104.1	45.0	43.3	117.8	13.1	14.4
F1	74	76	101.4				14.0	14.4
A2		71						11.0
F2	69	70	94.5	33.0	32.8	86.4	13.0	12.8
K2	65	66	89.0	43.5	41.7	113.9		
L2								
M2	69	72	94.5	33.0	36.7	86.4		
N2		70			36.5			
V2	81	79	111.0	41.0	41.7	107.3		
Z2	67	72	91.8	34.0	35.8	89.0	12.2	12.6
	81		111.0	53.0		138.7		
C3	71	69	97.3					10.8
J3		77						
K3	88	85	120.5					
S3	71	70	97.3				12.3	12.3
E4	63	69	93.2				10.2	11.2
N4								
Q4	63	71	93.2	36.0	37.0	94.2		
	69	73	94.5				11.8	12.3
Q4	78	76	106.8	37.0	37.0	96.8	14.2	14.6
T4		69						
FKB6	73	73	100.0	39.5	38.2	103.4	12.6	12.6
								100.0

NOTE B IS GIVEN IN APPENDIX.

TABLE IV

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 33 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	LB/M SQ CUM. AV.	IND. *B	CUR. AV.	MIL CUM. AV.	IND. *B
A1	5.6	5.3	101.8	32.7	32.6	98.5	9.1	8.7	94.8
C1	5.4	5.4	98.2	34.2	33.5	103.0	9.9	9.5	103.1
F1	5.2	5.3	94.5	33.1	33.2	99.7	9.2	9.1	95.8
K1	5.3	5.6	105.4	33.4	33.2	100.6	9.3	9.2	96.9
P1	5.6	6.7	120.0	33.1	33.1	99.7	10.0	10.0	104.2
Z1	6.0	5.5	109.1	33.5	33.6	100.9	9.5	9.5	99.0
A2	7.4	6.7	134.5	33.0	32.9	99.4	10.3	10.1	107.3
F2	5.0	5.0	90.9	33.0	33.1	99.4	10.0	10.0	104.2
K2	5.3	5.6	96.4	33.2	33.3	100.0	9.0	9.0	93.8
L2	5.9	6.0	107.3	33.3	33.0	100.3	9.4	10.0	97.9
M2	6.1	6.1	101.8	33.1	33.0	99.7	10.0	10.1	104.2
N2	5.6	5.8	101.8	33.1	33.0	99.7	10.0	10.1	104.2
Q2	5.4	5.4	92.7	33.6	33.4	101.2	9.6	9.4	100.0
R2	5.1	5.3	89.1	33.0	33.0	99.4	9.8	10.0	102.1
V2	4.9	5.0	85.4	33.9	33.7	102.1	10.0	10.0	104.2
W2	5.3	5.2	96.4	33.5	33.3	100.9	9.5	9.1	99.0
X2	6.0	5.8	109.1	33.1	33.1	99.7	8.7	9.0	90.6
Z2	5.4	5.4	98.2	33.6	34.0	101.2	9.9	10.0	103.1
A3	6.2	6.1	112.7	33.2	33.3	100.0	8.8	8.9	91.7
B3	4.7	4.8	85.4	33.9	33.7	102.1	10.0	10.0	104.2
C3	5.6	5.2	101.8	33.3	33.4	100.3	9.3	9.6	96.9
J3	4.2	4.2	76.4	33.0	33.0	99.4	10.3	10.5	107.3
K3	5.1	5.2	92.7	34.0	33.8	102.4	9.0	9.3	93.8
Q3	4.2	4.2	132.7	33.2	33.4	100.0	10.4	10.4	99.0
S3	7.3	7.3	132.7	33.2	33.1	100.0	9.5	9.0	99.0
U3	5.1	5.1	100.0	32.7	32.6	98.5	10.0	10.2	104.2
N4	5.5	5.5	100.0	32.7	32.7	98.5	10.0	10.2	104.2
O4	6.4	6.2	116.4	33.1	33.1	99.7	9.0	8.8	93.8
Q4	5.1	6.2	110.9	33.4	33.4	100.6	9.8	9.8	102.1
R4	7.6	7.6	138.2	32.8	32.8	99.8	10.3	10.3	107.3
T4	5.1	5.2	92.7	33.3	33.2	100.3	10.5	9.9	109.4
FKBG	5.7	5.5	103.6	33.3	33.2	100.3	9.6	9.6	100.0

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE IV (CONT)
 AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 33 LB KRAFT LINERBOARD

CODE	BURST			CD RING			CD STFI		
	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	CUM. AV.	IND. *B
A1	89	92	101.1				17.5	17.0	108.0
C1	79	82	89.8	44.0		79.0			
F1	87	93	98.9	65.0	64.9	116.7	17.0	18.2	104.9
K1	85	90	96.6		53.6		18.2	15.8	112.3
P1	86	89	97.7				16.4	15.6	101.2
Z1	88	92	100.0	71.6	69.4	123.5		19.9	
A2	81	83	92.0				11.9		73.4
F2	87	87	98.9	46.0	48.0	82.6	16.0	15.8	98.8
K2	82	80	93.2	59.9	64.4	107.5			
L2	91	83	103.4	49.0	49.8	88.0			
M2		81			44.8				
N2	92	89	104.5	58.0	53.7	104.1			
Q2		89							
R2	76	84	86.4	43.0	49.4	77.2			
V2	84	84	95.4	48.0	45.7	86.2	15.1	14.6	93.2
W2	84	87	95.4						
X2	92	92	104.5				15.0	14.8	92.6
Z2	100	94	113.6	65.0	63.0	116.7			
A3	81	82	92.0	60.0	55.2	107.7			
Q3	89	87	101.1	63.0	62.0	113.1	20.4	19.3	125.9
C3	84	83	95.4						
J3	37	89	98.9				13.6	13.8	84.0
K3	93	104	111.4						
Q3		90					15.2	16.7	104.3
S3	82	85	93.2						
U3		92			54.7				
N4	33	91	100.0	56.0	57.4	100.5			
Q4	83	89	101.1				14.1	14.1	87.0
Q4	83	90	100.0	54.0	55.3	96.9			
Q4	84		95.4				16.7	17.5	103.1
T4	75	81	85.2					15.3	
FKBG	85	88	97.7	55.9	55.7	100.4	15.1	16.2	99.4

NOTE 9 IS GIVEN IN APPENDIX.

TABLE V

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 33 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	PERCENT CUM. AV.	IND. *B	CUR. AV.	LB/M SQ CUM. AV.	FT IND. *B	CUR. AV.	MIL CUM. AV.	IND. *B
A1	5.6	5.7	100.0	32.8	32.7	98.8	8.8	8.8	91.7
C1	5.4	5.4	96.4	35.2	33.6	106.0	9.6	9.8	100.0
F1	5.2	5.4	92.8	33.3	33.2	100.3	9.2	9.1	95.8
K1	5.7	5.7	101.8	33.3	33.3	100.3	9.2	9.2	95.8
P1	6.3	6.6	121.4	33.1	33.1	99.7	10.0	10.0	104.2
Z1	6.0	5.7	107.1	33.6	33.6	101.2	9.8	9.5	102.1
A2	7.1	7.0	126.8	33.1	33.0	99.7	10.0	10.2	104.2
F2	5.0	5.0	89.3	33.0	33.1	99.4	10.1	10.1	105.2
K2	5.6	5.5	100.0	33.2	33.2	100.0	9.2	9.1	95.8
L2	5.7	6.0	101.8	32.9	33.0	99.1	9.8	9.9	102.1
N2	5.3	6.1	94.6	33.1	33.0	99.7	9.9	9.6	103.1
R2	5.2	5.8	92.8	35.4	34.5	106.6	8.3	9.2	86.4
V2	4.8	5.3	85.7	34.1	33.4	102.7	9.8	9.5	102.1
	4.9	5.0	82.5	33.0	33.0	99.4	9.6	9.9	100.0
N2	5.1	5.2	91.1	33.6	33.4	101.2	9.4	9.2	97.9
X2	6.0	5.9	107.1	33.1	33.1	99.7	8.6	8.9	89.6
Z2	5.8	5.4	103.6	33.9	33.9	102.1	10.2	10.0	106.2
A3	6.2	6.1	110.7	33.1	33.2	99.7	8.8	8.9	91.7
B3	4.6	4.8	82.1	33.9	33.7	102.1	10.9	10.0	113.5
C3	5.3	5.2	94.6	33.4	33.4	100.6	9.8	9.6	102.1
J3	4.2	4.2	75.0	33.0	33.0	99.4	10.9	10.5	113.5
K3	5.3	5.3	94.6	33.9	33.9	102.1	9.6	9.3	100.0
Q3		4.2		33.2	33.2			10.4	
S3	7.0	7.3	125.0	33.1	33.1	99.7	9.3	9.2	96.9
U3	4.9	5.1	87.5	32.9	32.6	99.1	9.6	9.7	100.0
W4	5.5	5.5	98.2	32.9	32.7	99.1	10.4	10.2	108.3
Q4	6.6	6.3	117.8	33.1	33.1	99.7	9.4	8.8	97.9
R4	6.0	6.2	107.1	33.4	33.4	100.6	9.9	9.8	103.1
R4	7.0	7.6	125.0	33.1	32.8	99.7	9.6	10.3	100.0
T4	5.3	5.2	94.6	33.2	33.2	100.0	9.9	10.0	103.1
FK35	5.6	5.6	100.0	33.4	33.2	100.6	9.6	9.6	100.0

NOTES A AND 9 ARE GIVEN IN APPENDIX.

TABLE V (CONT)
 AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 33 LB KRAFT LINERBOARD

CODE	BURST		CD RING		CD STFI	
	CUR. AV.	PSIG CUM. AV.	IND. *B	CRUSH, LB CUR. AV.	IND. *B	LB/IN CUM. AV.
A1	90	90	102.3			
C1	77	79	87.5			
F1	89	92	101.1			
K1	83	90	94.3			
P1	87	89	98.9			
Z1	89	92	101.1			
A2	82	82	93.2			
F2	85	87	96.6			
K2	81	80	92.0			
L2	83	85	94.3			
M2		81				
N2	95	89	108.0			
Q2	72	89	81.8			
R2	94	83	106.8			
V2	83	84	94.3			
W2	80	86	90.9			
X2	94	92	106.8			
Z2	88	94	100.0			
A3	83	82	94.3			
B3	87	87	98.9			
C3	81	83	92.0			
J3	84	89	95.4			
K3	94	103	106.8			
Q3		90				
S3	82	84	93.2			
U3	95	92	108.0			
N4	95	90	108.0			
O4	84	89	95.4			
Q4	88	90	100.0			
R4	82	84	93.2			
T4	80	79	90.9			
FKBG	86	88	97.7			

NOTE B IS GIVEN IN APPENDIX.

TABLE VI

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 33 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS			CALIPER		
	CUR. AV.	PERCENT CUM. AV.	IND. #B	CUR. AV.	LB/M SQ	WT. *A	CUR. AV.	MIL CUM. AV.	IND. #B
A1	6.1	5.7	108.9	32.8	32.7	98.5	9.0	8.8	93.8
C1	4.7	5.4	83.9	34.3	34.7	103.0	9.6	9.8	100.0
F1	5.0	5.4	89.3	33.2	33.2	99.7	9.3	9.1	96.9
K1	5.7	5.7		33.3	33.3			9.2	
P1	6.7	6.7	119.6	33.8	33.1	101.5	10.0	10.0	104.2
Z1	6.1	5.9	108.9	33.7	33.6	101.2	9.8	9.7	102.1
A2	7.1	7.1		33.0	33.0			10.1	
F2	5.0	5.0	89.3	33.1	33.1	99.4	10.2	10.1	106.2
K2	5.5	5.5	98.2	33.3	33.2	100.0	8.9	9.1	92.7
L2	5.4	5.9	96.4	32.8	33.0	98.5	9.9	9.8	103.1
M2	6.0	6.0		33.0	33.0			9.6	
N2	5.3	5.7	94.6	33.1	33.1	99.4	10.2	10.0	106.2
Q2	5.4	5.3	96.4	35.8	34.8	107.5	9.1	9.0	94.8
R2	4.3	5.2	85.7	34.1	33.6	102.4	9.7	9.6	101.0
V2	5.0	4.9	89.3	33.1	33.0	99.4	9.4	9.8	97.9
M2	5.3	5.2	94.6	33.1	33.4	99.4	9.6	9.3	100.0
X2	5.8	5.9	103.6	33.1	33.1	99.4	9.0	8.8	93.8
Z2	5.9	5.5	105.4	33.9	33.8	101.8	9.6	9.9	100.0
A3	6.2	6.1	110.7	33.1	33.2	99.4	9.3	8.9	96.9
B3	4.7	4.7	83.9	33.7	33.8	101.2	10.6	10.2	110.4
C3	4.8	5.2	85.7	33.1	33.4	99.4	9.9	9.6	103.1
J3	4.2	4.2	75.0	33.0	33.0	99.1	10.6	10.6	110.4
K3	5.0	5.3	89.3	34.0	33.9	102.1	9.5	9.4	99.0
Q3	4.2	4.2		33.1	33.1			10.4	
S3	6.7	7.2	119.6	33.1	33.1	99.4	9.2	9.2	95.8
U3	5.0	5.0	89.3	33.3	32.7	100.0	9.9	9.7	103.1
N4	5.4	5.5	96.4	32.0	32.7	96.1	10.5	10.3	109.4
Q4	6.3	6.4	112.5	33.1	33.1	99.4	9.3	8.9	96.9
R4	7.0	6.1	125.0	33.4	33.4	100.3	9.7	9.8	101.0
T4	7.3	7.3		33.1	33.0	99.4	8.9	10.0	92.7
FK3g	4.9	5.2	87.5	33.3	33.2	100.0	9.1	10.0	94.8
FK3g	5.5	5.6	98.2	33.4	33.3	100.3	9.6	9.6	100.0

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE VI (CONT)

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 33 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST		IND. *B	CD RING		IND. *B	CD STFI		IND. *B
		PSIG CUM.	AV.		CRUSH, LB CUM.	AV.		LB/IN CUM.	AV.	
A1	90.	90	103.4		47.5	43.0	34.8	15.0	16.6	93.8
C1	73	78	89.6		64.0	63.5	114.3	18.0	17.6	112.5
F1	90	91	103.4			56.2		16.6	16.6	113.8
K1		89						18.2	16.1	
P1	35	88	97.7							
Z1	89	92	102.3		72.6	69.7	129.6	20.2		
A2		82						12.6		
F2	83	86	95.4		47.0	47.8	83.9	15.7		98.1
K2	80	80	92.0		64.2	63.3	114.6			
L2	83	86	95.4		46.0	48.8	82.1			
M2		81				46.6				
N2	89	90	102.3		58.0	59.2	103.6			
Z2	90	85	103.4		52.0	48.2	92.8			
R2	90	85	103.4		50.0	47.7	89.3	15.4	14.8	96.2
V2	80	84	92.0							
W2	85	83	98.8							
X2	91	92	104.6		69.0	63.3	123.2	14.1	14.8	83.1
Z2	99	94	113.8		51.8	56.8	92.5			
A3	82	82	94.2		67.0	62.7	119.6	15.3	19.5	95.6
B3	89	87	102.3							
C3	84	83	96.6							
J3	71	89	104.6					13.9	13.6	86.9
K3	106	102	121.8							
Q3		91						15.2		
S3	30	34	92.0					17.0	16.7	106.2
U3	92	92	105.7		54.0	54.2	96.4			
M4	85	92	98.8		59.0	56.8	105.4	13.9	14.2	86.9
O4	89	83	102.3					17.5	17.3	109.4
Q4	92	89	105.7		54.0	55.2	96.4	17.4	16.7	108.3
R4	85	83	97.7							
T4	83	79	101.1							
FKB6	83	87	101.1		57.1	56.0	102.0	16.0	16.0	100.0

NOTE 3 IS GIVEN IN APPENDIX.

TABLE VII

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 38 LG KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	LB/M SQ FT CUM. AV.	IND. *B	CUR. AV.	MIL CUM. AV.	IND. *B
C1	5.3	5.5	100.0	40.4	40.9	104.9	11.1	11.1	104.7
F1	5.3	5.8	100.0	38.2	38.2	99.2	10.8	10.6	104.9
H1	6.5	6.0	112.1	38.4	38.4	99.7	10.7	10.6	100.9
K1		5.6			38.4			10.8	
Q1		5.6			38.0			10.1	
R1	5.6	5.7	96.6	39.1	38.8	101.6	9.4	9.3	88.7
W1	5.7	5.8	98.3	38.7	37.9	100.5	10.3	10.2	97.2
Z1	6.1	6.0	105.2	38.5	38.5	100.0	11.4	9.9	107.5
A2	7.4		127.6	38.1		99.0	11.5		108.5
F2	6.0	6.0	103.4	38.0	38.1	98.7	10.9	11.4	102.3
K2	5.3	5.9	100.0	38.3	38.3	99.5	10.1	9.9	95.3
N2	5.4	5.8	93.1	38.1	38.1	99.0	11.3	11.2	106.6
Q2	5.5	5.7	94.8	39.2	39.0	101.8	10.4	10.5	98.1
R2	5.6	6.0	96.6	38.7	38.2	100.5	10.9	10.7	102.8
S2		6.0			38.1			9.8	
T2		5.8			39.2			10.8	
W2	5.4	5.6	93.1	38.3	38.3	99.5	10.8	10.5	101.9
Y2	5.7	5.9	101.7	38.1	38.1	99.0	10.6	10.6	100.0
Z2	6.1	5.8	105.2	38.2	39.0	99.2	11.3	11.3	106.6
A3	6.2	6.2	106.9	38.1	38.4	99.0	10.2	10.4	96.2
33		5.0			38.8			11.4	
I3	5.3	6.1	100.0	38.3	38.2	99.5	11.2	11.2	105.7
T3		5.8			39.0			11.1	
X3	5.3	5.5	100.0	38.1	38.3	99.0	10.5	10.6	99.0
Y3		6.0			38.2			10.8	
R4		7.5			38.3			10.1	
T4		5.3			38.5			11.4	
FXBG	5.9	5.8	101.7	38.5	33.5	100.0	10.7	10.6	100.9

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE VII (CONT)

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 38 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST PSIG		IND. *B	CD RING CRUSH, LB		IND. *B	CD STFI LB/IN		IND. *B
		CUM. AV.	AV.		CUM. AV.	AV.		CUM. AV.	AV.	
C1	92	91	92.9	60.0	66.2	86.6	19.0	21.1	97.4	
F1	94	102	94.9	75.0	76.6	108.2	21.7	21.3	111.3	
H1	103	106	104.0							
K1		97			69.0			23.7		
A1		108			83.0					
R1	103	98	109.1	77.6	77.6	112.0				
W1	101	102	102.0	65.5	63.2	94.5				
Z1	98	102	99.0	86.4	81.1	124.7		22.1	76.9	
A2	99		100.0				15.0			
F2	99	98	100.0	55.0	60.0	79.4	13.0	17.9	92.3	
K2	96	94	97.0	76.1	76.4	109.8				
N2	106	102	107.1	74.0	75.8	106.8				
Q2	99	99	100.0							
R2	83	95	88.9	52.0	57.8	75.0				
S2		98								
T2		93			77.7					
W2	96	97	97.0		63.0					
Y2	98	101	99.0	67.0	57.0	96.7	18.7	17.2	95.9	
Z2	101	103	102.0	76.0	66.5	109.7				
A3	96	94	97.0	78.0	67.1	112.6				
B3		94			67.0					
I3	113	97	114.1				18.0	17.4	92.3	
T3		101			62.7			14.2		
X3	107	104	103.1	71.0	64.3	102.4	19.2	17.6	98.5	
Y3		96						19.2		
R4		101								
T4		91						15.8		
FK3G	100	99	101.0	70.3	69.3	101.4	13.5	19.5	94.9	

NOTE B IS GIVEN IN APPENDIX.

TABLE VIII

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 38 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	PERCENT CUM. AV.	IND. *B	CUR. AV.	LB/M SQ FT CUM. AV.	IND. *B	CUR. AV.	MIL CUM. AV.	IND. *B
A1	5.3		100.0	37.5		97.4	10.1		95.3
C1	5.3	5.6	91.4	42.2	40.6	109.6	11.8	11.0	111.3
F1	5.7	5.8	98.3	38.2	38.3	99.2	10.8	10.6	101.9
H1	6.4	6.1	110.3	38.3	38.4	99.5	10.5	10.7	99.0
K1	5.8	5.6	100.0	38.4	38.3	99.7	11.2	10.8	105.7
Q1		5.4			38.4		10.1		
R1		5.6			39.0		9.4		
W1	5.9	5.8	101.7	38.2	38.0	99.2	10.8	10.1	101.9
Z1	6.2	6.1	106.9	38.7	38.5	100.5	11.5	10.2	108.5
A2		7.4			38.1		11.5		
F2		6.0			38.1		11.4		
K2	5.9	5.9	101.7	38.2	38.3	99.2	10.1	10.0	95.3
M2	5.3	5.7	91.4	38.1	38.1	99.0	11.4	11.3	107.5
Q2	5.7	5.7	98.3	38.9	39.1	101.0	10.1	10.4	95.3
R2	5.1	6.0	87.9	39.2	38.3	101.8	11.0	10.7	103.8
S2		6.0			38.1		9.8		
T2	5.9	5.8	101.7	38.7	39.3	100.5	10.6	10.7	100.0
W2	5.0	5.6	86.2	38.5	38.3	100.0	10.4	10.5	98.1
Y2	5.9	5.9	101.7	38.1	38.1	99.0	10.4	10.6	98.1
Z2	5.7	5.8	98.3	39.0	38.8	101.3	11.5	11.3	108.5
A3	6.2	6.2	106.9	38.1	38.3	99.0	10.3	10.3	97.2
B3		4.9			38.8		12.0		
C3	5.6		96.6	38.5		100.0	10.6		100.0
I3		6.0			38.2		11.2		
S3	6.9		119.0	38.1		99.0	10.6		100.0
T3		5.8	106.9	39.5	38.9	103.6	11.0		
X3	6.2	5.6	101.7	38.3	38.3	99.5	10.6	10.6	100.0
Y3	5.3	6.0			38.2		10.8		
R4		7.5			38.2		10.1		
T4		5.3			38.5		11.4		
FKB6	5.3	5.8	100.0	38.6	38.5	100.2	10.8	10.6	101.9

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE VIII (CONT)

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 38 LB KRAFT LINERBOARD

CODE	BURST		CD RING			CD STFI	
	CUR. AV.	PSIG CUM. AV.	IND. *B	CUR. AV.	CRUSH, LB CUM. AV.		LB/IN CUM. AV.
A1	110		111.1				
C1	91	91	91.9		63.0	64.6	90.9
F1	98	100	99.0		72.0	75.6	103.9
H1	110	105	111.1				
K1	91	98	91.9			71.0	
							18.9
Q1		107					
R1		103				77.6	
W1	94	102	94.9		60.0	64.2	86.6
Z1	101	101	102.0		87.9	81.9	126.8
A2		99					
							20.4
							15.0
F2		99					
K2	93	94	93.9		79.2	60.0	
N2	102	103	103.0		71.0	75.2	114.3
Q2	94	99	94.9				
R2	95	95	96.0		59.0	56.9	85.1
							17.8
S2		98					
T2	98	94	99.0		80.0	78.3	115.4
W2	98	97	99.0			63.0	
Y2	99	100	100.0		64.0	62.0	92.4
Z2	102	102	103.0		74.0	71.2	106.8
							18.8
							18.0
A3	94	94	94.9		73.5	69.2	106.1
B3		92				65.0	
C3	95		96.0				
I3		102					
S3	96		97.0				
							17.6
							19.6
							101.6
I3	118	100	119.2		69.0	59.5	99.6
X3	103	105	104.0		66.0	65.7	95.2
Y3		95					
R4		101					
T4		91					
							17.8
							19.6
							15.8
							92.7
FKB6	99	99	100.0		70.7	69.3	102.0
							19.0
							19.3
							98.4

NOTE 3 IS GIVEN IN APPENDIX.

TABLE IX

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 38 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	CUM. AV.	IND. *B
A1	6.5	5.8	112.1	37.7	37.5	97.9	9.8	10.1	91.6
C1	5.3	5.5	91.4	39.5	40.7	102.6	11.0	11.1	102.8
F1	5.6	5.8	96.6	38.0	38.2	98.7	10.6	10.6	99.1
H1	6.4	6.2	110.3	38.3	38.4	99.5	10.4	10.6	97.2
K1		5.7			38.3			10.9	
Q1	5.3	5.4	91.4	38.2	38.4	99.2	9.8	10.1	91.6
R1		5.6			39.0			9.4	
W1	5.6	5.8	96.6	37.7	38.0	97.9	10.1	10.3	94.4
Z1	6.4	6.1	110.3	38.6	38.5	100.2	11.6	10.6	103.4
A2		7.4			38.1			11.5	
F2		6.0			38.1			11.4	
K2	5.9	5.8	101.7	38.3	38.2	99.5	10.2	10.0	95.3
M2	5.3	5.6	91.4	38.2	38.1	99.2	11.5	11.3	107.5
Q2	5.7	5.6	98.3	39.0	39.2	101.3	10.2	10.2	95.3
R2	4.9	5.8	84.5	39.3	38.5	102.1	11.2	10.8	104.7
S2		6.0			38.1			9.8	
T2	6.0	5.9	103.4	39.0	39.1	101.3	10.9	10.7	101.0
W2		5.4			38.3			10.5	
Y2	5.9	5.9	101.7	38.1	38.1	99.0	10.6	10.5	99.1
Z2	6.4	5.8	110.3	38.9	38.8	101.0	10.6	11.3	99.1
A3	6.2	6.2	106.9	38.2	38.3	99.2	10.4	10.3	97.2
B3		4.9			38.8			12.0	
C3		5.6			38.5			10.6	
I3	5.7	6.0	98.3	38.1	38.2	99.0	10.5	11.2	98.1
S3		6.9			38.1			10.6	
T3		5.9			39.1			11.0	
X3	5.7	5.6	98.3	38.5	38.3	100.0	11.2	10.6	104.7
Y3		6.0			38.1			10.7	
R4	6.7	7.5	115.5	38.1	38.2	99.0	10.4	10.1	97.2
T4		5.3			38.5			11.4	
FK3G	5.9	5.8	101.7	38.4	38.5	99.7	10.6	10.7	99.1

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE IX (CONT)

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 38 LB KRAFT LINERBOARD											
BURST			CD RING			CD STIFF			IND. *B		
CODE	CUR.	AV.	IND.	CUR.	AV.	IND.	CUR.	AV.	IND.	CUR.	AV.
A1	96	110	97.0	59.0	64.3	85.0	17.3	18.9	89.6	103.6	20.4
C1	95	91	93.9	74.0	74.5	106.6	20.0	20.4	103.6	103.1	21.4
F1	102	100	103.0	71.0	71.0	19.9	21.7	21.7	103.1	103.1	21.7
H1	103	105	104.0	117.2	117.2	19.1	19.1	19.1	99.0	99.0	21.7
Q1	115	107	117.2	103	77.6	87.3	19.1	19.1	99.0	99.0	21.7
R1	103	100	101.0	60.6	63.8	87.3	19.1	19.1	99.0	99.0	21.7
W1	100	101	101.0	84.8	83.2	122.2	19.1	19.1	99.0	99.0	21.7
Z1	93	101	99.0	77.3	75.7	111.4	17.8	17.8	99.0	99.0	21.7
F2	94	99	94.9	60.2	60.2	111.4	17.8	17.8	99.0	99.0	21.7
K2	94	94	94.9	72.3	72.3	111.4	17.8	17.8	99.0	99.0	21.7
N2	99	103	100.0	70.0	74.4	100.9	17.8	17.8	99.0	99.0	21.7
Q2	104	97	103.0	58.0	57.4	83.6	17.8	17.8	99.0	99.0	21.7
R2	95	95	96.0	58.0	57.4	83.6	17.8	17.8	99.0	99.0	21.7
S2	98	94	94.9	79.5	73.6	114.6	17.8	17.8	99.0	99.0	21.7
T2	94	97	97.0	62.0	62.7	89.3	17.8	17.8	99.0	99.0	21.7
W2	96	99	97.0	76.0	72.2	109.5	17.8	17.8	99.0	99.0	21.7
Z2	113	102	114.1	66.8	70.7	96.2	17.8	17.8	99.0	99.0	21.7
A3	92	94	92.9	66.8	70.7	96.2	17.8	17.8	99.0	99.0	21.7
C3	95	102	115.2	66.8	70.7	96.2	17.8	17.8	99.0	99.0	21.7
I3	114	102	115.2	66.8	70.7	96.2	17.8	17.8	99.0	99.0	21.7
S3	96	96	96	66.8	70.7	96.2	17.8	17.8	99.0	99.0	21.7
T3	111	106	112.1	61.0	62.7	87.9	17.8	17.8	99.0	99.0	21.7
X3	105	105	106.1	70.0	65.7	100.9	17.8	17.8	99.0	99.0	21.7
Y3	96	101	97.0	66.8	70.7	96.2	17.8	17.8	99.0	99.0	21.7
R4	96	101	97.0	66.8	70.7	96.2	17.8	17.8	99.0	99.0	21.7
T4	91	91	91	66.8	70.7	96.2	17.8	17.8	99.0	99.0	21.7
FKB3	101	99	102.0	69.2	69.4	99.7	19.2	19.2	99.5	99.5	21.7

NOTE # IS GIVEN IN APPENDIX.

TABLE X

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 42 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS			CALIPER		
	CUR. AV.	PERCENT CUR. AV.	IND. *B	LB/H SQ FT CUR. AV.	CUH. AV.	HT. *A IND. *B	CUR. AV.	MIL CUM. AV.	IND. *B
A1	6.0	6.1	101.7	41.8	41.6	99.0	11.7	11.2	99.2
91	6.2	6.4	105.1	41.8	41.7	99.0	11.7	11.6	99.2
C1	5.9	5.7	100.0	42.9	42.2	101.6	11.3	11.2	95.8
F1	5.9	5.9	100.0	42.1	42.2	99.8	11.7	11.8	99.2
H1	6.7	6.1	113.6	42.2	42.2	100.0	11.9	12.0	100.8
K1	6.1	6.1	103.4	42.5	42.3	100.7	12.0	12.0	101.7
O1	5.8	6.0	98.3	42.6	42.3	100.9	12.6	12.4	106.8
P1	6.6	6.7	111.9	42.2	42.2	100.0	12.0	12.0	101.7
Q1	5.3	5.8	98.3	41.9	42.3	99.3	11.3	11.1	95.8
R1	5.3	5.9	98.3	42.7	42.9	101.2	10.4	10.6	88.1
W1	6.3	6.0	101.7	42.2	42.1	100.0	11.3	11.2	95.8
X1	5.3	5.2	89.8	42.4	42.2	100.5	12.0	12.4	101.7
Z1	6.4	6.3	108.5	42.4	42.3	100.5	11.9	11.0	100.8
A2	7.3	7.1	123.7	42.2	42.0	100.0	12.6	12.6	106.8
F2	6.0	6.0	101.7	42.0	42.0	99.5	11.7	12.3	99.2
G2	5.9	5.3	100.0	42.2	42.7	100.0	11.0	11.5	93.2
K2	6.1	6.1	100.0	42.2	41.8	100.0	11.0	12.3	105.1
M2	5.7	5.8	96.6	42.1	42.1	99.8	12.4	12.6	89.8
N2	5.6	5.8	94.9	43.1	43.0	102.1	10.6	11.4	105.1
Q2	5.6	5.8	94.9	43.1	43.0	102.1	10.6	11.4	89.8
R2	5.6	6.1	94.9	42.6	42.3	100.9	11.8	11.7	100.0
S2	6.3	6.2	106.8	42.3	42.3	100.2	11.1	11.2	94.1
T2	6.0	6.0	101.7	42.8	42.7	101.4	11.5	11.7	97.4
W2	5.4	5.5	91.5	42.3	42.3	100.2	11.5	11.4	97.4
X2	6.2	6.2	105.1	42.1	42.1	99.8	10.8	11.1	91.5
Y2	5.9	5.9	100.0	42.0	42.1	99.5	11.5	11.5	97.4
Z2	6.0	5.8	101.7	42.3	42.8	100.2	12.4	12.7	105.1
A3	6.2	6.1	105.1	42.1	42.2	99.8	11.0	11.2	93.2
C3	5.3	5.2	89.8	42.9	42.6	101.6	12.8	12.5	103.5
C3		5.2		42.7				12.2	
H3	6.6	6.5	111.9	42.2	42.2	100.0	11.4	11.4	96.6
I3	6.0	5.9	101.7	42.1	42.1	99.8	12.2	12.3	103.4
J3	5.2	5.2	88.1	42.1	42.1	99.8	12.3	12.5	104.2
O3	5.4	5.0	91.5	43.0	43.0	101.9	11.4	11.9	96.6
P3	5.3	5.8	89.8	42.6	42.4	100.9	12.0	12.0	101.7
T3	5.3	5.2	89.8	42.3	42.1	100.2	12.4	12.3	105.1
U3	7.1	5.8	120.3	42.1	42.3	99.8	12.0	12.1	105.1
U3	5.7	5.8	96.6	42.3	42.3	100.2	12.4	12.1	105.1
U3	5.4	5.6	91.5	41.8	41.6	99.0	12.3	12.4	104.2
V3	6.1	6.4	103.4	42.1	42.2	99.8	11.8	11.8	100.0
W3	5.6	5.8	94.9	42.2	42.4	100.0	11.0	11.4	93.2
X3	6.0	5.8	101.7	42.1	42.2	99.8	11.5	11.6	97.4
Y3	6.0	6.0	101.7	42.1	42.2	99.8	11.1	11.8	94.1
Y4	5.2	5.2	88.1	42.3	42.2	100.2	11.9	11.8	100.3
Y4	6.3	6.3	106.8	42.1	42.2	99.8	10.8	11.4	91.5
Z4	7.7	7.4	130.5	42.1	41.9	99.3	12.7	11.3	107.6
S4	5.3	5.8	98.3	42.2	42.3	100.0	11.5	11.0	97.4
T4	5.3	6.2	98.3	42.4	42.3	100.5	12.1	12.2	102.5
FX3G	5.3	5.9	101.7	42.3	42.2	100.2	11.7	11.8	99.2

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE X (CONT)
 AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 42 LB KRAFT LINERBOARD

CODE	BURST			CD RING			CD STFI		
	CUR. AV.	PSIG CUM. AV.	IND. #B	CUR. AV.	CUM. AV.	IND. #B	CUR. AV.	CUM. AV.	IND. #B
A1	107	110	100.9						
B1	102	102	96.2	72.0	73.7	93.8	22.3	21.2	110.9
C1	98	98	92.4	73.0	74.0	95.0			
F1	104	108	98.1	85.0	85.3	110.7	22.0	22.4	109.4
H1	103	111	101.9				24.1	23.1	119.9
K1	104	105	98.1		71.4				
O1	106	104	100.0	78.0	77.3	101.6	22.6	26.4	112.4
P1	102	103	96.2				21.4	20.2	106.5
Q1	121	113	114.2		84.5		21.2	19.2	105.5
R1	110	111	103.8	87.6	87.3	114.1	22.7	24.3	112.9
W1	105	107	99.0	70.9	70.6	92.3			
X1	114	107	107.5	90.0	73.5	117.2			
Z1	103	109	99.0	93.6	90.0	121.9	22.9		
A2	106	106	100.0				16.3	16.4	81.1
F2	105	106	99.0	64.0	63.2	83.3	20.4	19.9	101.5
G2									
K2	107	108			91.9			22.7	
M2	107	104	100.9	85.6	86.6	111.4			
N2	103	101			65.1				
Q2	101	107	101.9	80.0	80.7	104.2			
R2	100	103	94.3	61.0	64.2	79.4			
S2	102	104	96.2						
T2	103	103	97.2	92.6	87.0	120.6		18.4	
W2	104	104	98.1		63.0				
X2	107	107	100.9				19.4	18.8	96.5
Y2	104	105	98.1	71.0	70.8	92.4	20.2	20.2	100.5
Z2	115	109	108.5	81.0	74.0	105.5			
A3	103	102	97.2	79.0	75.2	102.9			
B3	103	100	97.2	78.0	77.5	101.6	20.8	21.9	103.5
C3									
H3	113	115	111.3		61.0				
I3	116	107	109.4				20.4	20.3	101.5
J3	104	107	98.1				19.4	19.2	96.5
O3	124	103	117.0	82.0	79.3	106.8	17.5	16.4	87.1
P3	103	110	97.2	62.0	69.3	80.7			
Q3	107	108	100.9						
S3	106		100.0				18.2	18.3	90.5
T3	106	108	100.0	69.0	69.0	89.8	20.9	17.0	104.0
U3	104	106	98.1	69.0	72.3	89.8			
V3	113	119	106.6				22.0	23.8	109.4
W3	105	103	99.0	80.6	86.0	104.9			
X3	110	110	103.8	72.0	67.3	93.8	19.5	18.3	97.0
Y3	101	103	95.3				20.6	20.1	102.5
A4	111	109	104.7				18.4	17.6	91.5
O4	113	103	106.6				18.8	17.8	93.5
R4	106	110	100.0				20.4	18.8	101.5
S4	109	112	102.8				21.0	23.0	104.5
T4	101	99	95.3	84.0	83.2	109.4		17.7	
FKAS	107	106	100.9	77.5	76.8	109.9	20.4	20.1	101.5

NOTE B IS GIVEN IN APPENDIX.

TABLE XI

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 42 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS			WT. %A			CALIPER		
	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	LB/M SQ	CUM. AV.	CUR. AV.	CUM. FT	IND. *B	CUR. AV.	MIL CUM. AV.	IND. *B
A1	5.9	6.1	98.3	42.3	41.6	100.2	11.4	11.3	97.4			
B1	5.8	6.4	96.7	42.0	41.7	99.5	11.5	11.6	98.3			
C1	5.4	5.7	90.0	43.1	42.4	102.1	11.9	11.2	101.7			
F1	5.9	5.9	98.3	42.2	42.2	100.0	12.0	11.8	102.6			
H1	6.7	6.2	111.7	42.2	42.2	100.0	11.9	12.0	101.7			
K1	6.0	6.1	100.0	42.4	42.3	100.5	12.1	12.1	103.4			
O1	5.6	5.9	93.3	42.6	42.3	100.9	12.5	12.5	106.8			
P1	6.8	6.6	113.3	42.2	42.2	100.0	12.0	12.0	102.6			
Q1	5.9	5.8	98.3	43.0	42.2	101.9	11.6	11.1	99.1			
R1	6.0	5.8	100.0	42.6	43.0	100.9	10.5	10.5	89.7			
W1	6.0	6.0	100.0	42.2	42.1	100.0	11.1	11.2	94.9			
X1	5.5	5.2	91.7	42.2	42.3	100.0	11.5	12.4	98.3			
Z1	6.4	6.3	106.7	42.3	42.3	100.2	12.5	11.2	106.8			
A2	7.3	7.2	121.7	42.1	42.0	99.8	12.6	12.6	107.7			
F2		6.0		42.0	42.0		12.1					
G2	5.3	5.3	88.3	43.8	42.7	103.8	12.4	11.6	106.0			
K2	6.1	6.1	101.7	42.2	42.2	100.0	11.2	10.9	95.7			
M2		6.1		41.7	41.7		12.3	12.3				
N2	5.5	5.7	91.7	42.1	42.1	99.8	12.4	12.5	106.0			
O2	3.6		60.0	42.1		99.8	10.7		91.4			
Q2	5.8	5.8	96.7	43.0	43.0	101.9	11.1	11.2	94.9			
R2	5.0	6.0	83.3	43.3	42.3	102.6	12.0	11.7	102.6			
S2	6.3	6.3	105.0	42.4	42.2	100.5	11.2	11.2	95.7			
T2	6.0	6.0	100.0	42.6	42.8	100.9	11.4	11.6	97.4			
W2	5.4	5.5	90.0	42.4	42.3	100.5	11.3	11.4	96.6			
X2	6.3	6.2	105.0	42.1	42.1	99.8	10.8	11.0	92.3			
Y2	5.9	5.9	98.3	42.1	42.1	99.3	11.6	11.5	99.1			
Z2	6.2	5.9	103.3	42.5	42.7	100.7	12.1	12.7	103.4			
A3	6.2	6.1	103.3	42.1	42.1	99.8	11.1	11.1	94.9			
B3	5.2	5.2	86.7	42.9	42.6	101.6	12.9	12.6	110.2			
C3		5.2		42.7	42.7		12.2	12.2				
H3	6.5	6.5	108.3	42.2	42.2	100.0	11.6	11.5	99.1			
I3	5.8	6.0	96.7	42.1	42.1	99.8	11.8	12.3	100.8			
J3	5.2	5.2	86.7	42.1	42.1	99.8	12.7	12.4	108.5			
K3	5.1	4.9	85.0	42.8	43.1	101.4	11.7	11.7	100.0			
P3	5.0	5.7	83.3	43.3	42.4	102.6	12.1	12.0	103.4			
Q3	5.2	5.2	86.7	42.5	42.2	100.7	12.6	12.3	107.7			
S3		7.1		42.1	42.1		12.0	12.0				
T3	5.3	5.8	96.7	42.3	42.3	100.2	12.1	12.1	103.4			
U3	5.4	5.5	90.0	41.8	41.6	99.0	12.6	12.4	107.7			
V3	6.0	6.4	100.0	42.1	42.2	99.8	12.2	11.8	104.3			
W3	5.6	5.8	93.3	42.3	42.4	100.2	11.2	11.4	95.7			
X3	6.0	5.9	100.0	42.1	42.2	99.8	11.6	11.6	99.1			
Y3	6.0	6.0	100.0	42.1	42.2	99.8	11.2	11.7	95.7			
A4	5.1	5.2	85.0	42.2	42.2	100.0	11.8	11.8	100.8			
O4	6.5	6.3	108.3	42.1	42.2	99.3	11.5	11.3	98.3			
R4	7.2	7.5	120.0	42.1	42.0	99.3	12.1	11.7	103.4			
S4	5.9	5.8	98.3	42.2	42.3	100.0	11.4	11.0	97.4			
T4	6.1	6.2	101.7	42.3	42.3	100.2	12.4	12.1	106.0			
FKB3	5.8	6.0	96.7	42.4	42.2	100.5	11.8	11.7	100.8			

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE XI (CONT)

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 42 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST		IND. *B	CD RING CRUSH, LB		IND. *B	CD STFI LR/TN		IND. *B
		PSIG CUM. AV.	PSIG CUM. AV.		CUR. AV.	CUM. AV.		CUR. AV.	CUM. AV.	
A1	111	110	104.7		71.0	73.4	92.4	21.2	21.4	105.5
A1	101	102	95.3		68.0	73.8	88.5	21.0	22.2	104.5
C1	99	98	93.4		80.0	84.6	104.2	23.0	23.1	114.4
F1	105	108	99.0							
H1	110	110	103.8							
K1	104	106	98.1			73.1		20.0	25.2	99.5
O1	107	104	100.9		80.0	77.5	104.2	21.4	20.3	106.5
P1	102	103	96.2					20.4	19.7	101.5
Q1	110	114	103.8			82.7			23.8	
R1	108	112	101.9		87.4	87.6	113.8			
W1	104	106	98.1		69.9	70.8	91.0			
X1	109	108	102.8		86.0	76.5	112.0			
Z1	103	109	97.2		94.9	90.2	123.6		22.1	
A2	106	106	100.0					16.4	16.4	81.6
F2		106				64.5			19.8	
G2	113	108	111.3		103.1	91.6	134.2		22.6	
K2	105	104	99.0		85.1	94.3	110.8			
M2	107	101				65.4				
N2	107	107	100.9		79.0	81.0	102.9	17.9		89.0
P2	114		107.5							
Q2	109	107	94.3							
Q2	102	103	96.2		66.0	63.2	35.9			
S2	104	104	98.1							
T2	103	102	97.2		89.1	83.1	116.0			
V2	106	104	100.0			63.0				
X2	107	107	100.9					13.6	18.9	92.5
Y2	103	106	97.2		71.0	70.3	92.4	20.2	19.9	100.5
Z2	112	110	105.7		86.0	77.5	112.0			
A3	102	102	96.2		79.0	76.2	102.9			
B3	102	100	96.2		77.0	77.3	109.3	19.7	20.6	98.0
C3		103								
H3	116	115	109.4			61.0		19.3	20.4	98.5
I3	117	108	110.4					20.0	19.1	99.5
J3	105	106	99.0					17.2	16.6	85.6
O3	116	109	109.4		71.0	82.3	92.4			
P3	107	108	100.9		68.0	45.8	88.5	19.3	18.5	96.0
Q3	106	108	100.0						20.9	
S3	109	106	102.8		67.0	68.8	87.2		17.1	
T3	108	106	101.9		72.0	72.0	93.8			
U3										
V3	111	118	104.7					22.0	23.6	109.4
W3	102	103	96.2		31.6	83.1	106.2			
X3	111	110	104.7		71.0	63.0	92.4	19.2	18.5	95.5
Y3	103	102	97.2					21.1	20.4	105.0
A4	112	110	105.7					18.9	17.8	94.0
O4	105	109	99.0					19.0	18.2	94.5
R4	108	109	101.9					21.1	19.2	105.0
S4	111	111	104.7		83.0	83.2	108.1	21.0	22.6	104.5
T4	100	100	94.3							
FK36	107	106	100.9		78.6	76.3	102.3	19.9	20.1	99.0

NOTE B IS GIVEN IN APPENDIX.

TABLE XII

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 42 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	PERCENT CUM. AV.	IND. *B	CUR. AV.	LB/M SQ FT CUM. AV.	IND. *B	CUR. AV.	MIL CUM. AV.	IND. *B
A1	6.2	6.0	105.1	41.9	41.8	99.0	11.1	11.3	94.9
91	5.7	6.3	96.6	42.0	41.7	99.3	11.6	11.5	99.1
C1	5.6	5.6	94.9	43.0	42.5	101.6	11.8	11.3	100.8
F1	5.9	5.9	100.0	42.1	42.2	99.5	11.9	11.8	101.7
H1	6.5	6.3	110.2	42.2	42.2	99.8	11.8	12.0	100.8
K1	6.1	6.0	103.4	42.8	42.3	101.2	11.7	12.1	100.0
O1	5.5	5.8	93.2	42.5	42.4	100.5	12.6	12.5	107.7
P1	6.7	6.7	113.6	42.2	42.2	99.8	12.0	12.0	102.6
Q1	5.6	5.8	94.9	42.1	42.4	99.5	10.6	11.2	90.6
R1	5.3	5.8	98.3	42.7	42.9	100.9	10.9	10.4	93.2
W1	5.9	6.0	100.0	42.1	42.1	99.5	11.3	11.2	96.6
X1	5.4	5.2	91.5	42.3	42.3	100.0	12.0	12.2	102.6
Z1	6.4	6.4	108.5	42.4	42.3	100.2	12.8	11.5	109.4
A2	7.0	7.2	118.6	42.1	42.0	99.5	12.1	12.6	103.4
F2		6.0			42.0			12.1	
G2	5.6	5.3	94.9	43.2	42.9	102.1	12.9	11.8	110.2
K2	6.0	6.0	101.7	42.4	42.2	100.2	11.1	11.0	94.9
M2		6.0			41.8			12.3	
N2		5.7			42.1			12.5	
P2		3.6			42.1			10.7	
Q2	5.9	5.7	100.0	43.0	43.0	101.6	11.3	11.1	96.6
R2	5.0	5.8	84.7	43.3	42.5	102.4	12.2	11.8	104.3
S2	6.2	6.4	105.1	42.3	42.3	100.0	11.3	11.2	96.6
T2	6.0	6.0	101.7	42.8	42.7	101.2	11.3	11.6	96.6
W2	5.2	5.5	88.1	42.2	42.2	99.8	11.6	11.4	99.1
X2	6.2	6.2	105.1	42.0	42.1	99.3	11.0	11.0	94.0
Y2	5.7	5.9	100.0	42.1	42.1	99.5	11.6	11.5	99.1
Z2	6.6	6.0	111.9	42.6	42.6	100.7	12.0	12.5	102.6
A3	6.2	6.1	105.1	42.1	42.1	99.5	11.3	11.1	96.6
B3	5.1	5.2	86.4	42.6	42.7	100.7	12.7	12.7	108.5
C3		5.1			42.7			12.2	
H3	6.6	6.6	111.9	42.2	42.2	99.8	11.6	11.6	99.1
I3	5.7	6.0	96.6	42.0	42.1	99.3	11.4	12.2	97.4
J3	5.2	5.2	83.1	42.1	42.1	99.5	12.5	12.5	106.8
O3	5.6	5.1	94.9	42.9	42.9	101.4	11.0	11.6	94.0
P3	4.3	5.6	81.4	43.4	42.6	102.6	12.2	12.0	104.3
Q3	5.3	5.2	89.8	42.3	42.2	100.0	12.4	12.4	106.0
S3	6.5	7.1	110.2	42.1	42.1	99.5	11.9	12.0	101.7
T3		5.8		42.3	42.3	100.0	12.1	12.1	103.4
U3	5.6	5.5	94.9	41.8	41.7	98.8	12.6	12.4	107.7
V3	6.0	6.1	101.7	42.1	42.1	99.5	12.0	11.8	102.6
W3	5.8	5.7	98.3	42.3	42.4	100.0	11.0	11.3	94.0
X3	6.0	5.9	101.7	42.1	42.1	99.5	11.4	11.6	97.4
Y3	6.0	6.0	101.7	42.1	42.2	99.5	11.1	11.6	94.9
A4	5.1	5.2	86.4	42.5	42.2	100.5	12.0	11.9	102.6
O4	6.3	6.4	106.8	42.1	42.2	99.5	11.8	11.2	100.8
R4	7.0	7.4	118.6	42.1	42.0	99.5	10.9	11.8	93.2
S4	5.8	5.8	98.3	42.4	42.3	100.2	11.3	11.1	96.6
T4	5.9	6.2	100.0	42.5	42.3	100.5	11.8	12.1	100.8
FK35	5.7	5.9	100.0	42.4	42.3	100.2	11.7	11.7	100.0

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE XII (CONT)

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 42 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST PSIG		IND. *B	CD RING CRUSH, LB		IND. *3	CD STFI LB/IN		IND. *8
		CUR. AV.	AV.		CUR. AV.	CUM. AV.		CUR. AV.	CUM. AV.	
A1	106	108	108	99.1	73.0	73.3	94.4	20.0	21.3	99.5
B1	103	102	102	96.3	73.5	72.8	95.1			
C1	98	98	98	91.6	82.0	83.4	106.1	22.0	22.0	109.4
F1	106	107	107	99.1				22.3	23.2	110.9
H1	109	110	110	101.9						
K1	103	106	106	100.9		75.2		21.2	23.9	105.5
O1	102	104	104	95.3	79.0	78.3	102.2	18.6	20.6	92.5
P1	102	102	102	95.3				21.6	20.1	107.5
Q1	125	113	113	116.8		88.0		25.2	23.8	125.4
R1	104	111	111	97.2	85.8	87.6	111.0			
W1	106	106	106	99.1	70.3	71.0	90.9			
X1	103	108	108	96.3	83.0	78.5	107.4		22.2	
Z1	102	108	108	95.3	94.2	91.2	121.9	16.5	16.4	82.1
A2	106	106	106	99.1		64.0		19.7		
F2		106								
G2	115	111	111	107.5	98.7	94.1	127.7		22.7	
K2	106	104	104	99.1	93.2	84.8	120.6			
M2		101	101			65.8				
N2		107	107			81.0				
P2		114						17.9		
Q2	106	106	106	99.1						
R2	104	103	103	97.2	65.0	63.7	84.1			
S2	101	103	103	94.4						
T2	103	103	103	96.3	88.6	88.7	114.6			
W2	104	104	104	97.2		68.0				
X2	105	107	107	98.1						
Y2	103	105	105	96.3	72.0	71.0	93.1	18.6	19.0	92.5
Z2	113	111	111	110.3	105.0	80.3	135.8	20.4	20.0	101.5
A3	102	102	102	95.3	75.4	76.8	97.5			
J3	101	101	101	94.4	79.0	78.0	102.2	19.1	20.6	95.0
C3		103								
H3	112	115	115	111.2				19.6	20.4	97.5
I3	121	110	110	113.1				21.6	19.2	107.5
J3	109	106	106	101.9				17.9	16.6	89.0
O3	116	114	114	108.4	69.0	78.7	99.3			
P3	112	107	107	104.7						
Q3	108	108	108	100.9	66.0	66.2	85.4	19.2	18.8	99.0
S3	106	106	106	99.1				20.9	20.9	104.0
T3	111	107	107	103.7	66.0	63.3	85.4		17.2	
U3	103	106	106	100.9	77.0	72.3	99.6			
V3	114	116	116	106.5				22.0	23.2	109.4
W3	102	103	103	95.3	88.9	81.6	115.0			
X3	110	110	110	102.8	72.0	63.5	93.1	19.4	18.6	96.5
Y3	101	102	102	94.4				20.2	20.8	100.5
A4	111	111	111	103.7				20.2	18.1	100.5
O4	105	109	109	98.1						
R4	105	109	109	98.1				18.0	18.4	89.6
S4	115	111	111	107.5	38.0	82.7	113.8	20.8	19.6	103.5
T4	103	100	100	96.3				22.0	22.3	109.4
FK3G	107	107	107	100.0	80.2	77.3	103.8	20.3	20.1	101.0

NOTE B IS GIVEN IN APPENDIX.

TABLE XIII

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 69 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	LB/M SQ CUM. AV.	FT IND. *B	CUR. AV.	MIL CUM. AV.	IND. *B
A1	6.1	6.2	95.3	68.7	68.5	99.1	20.0	19.4	104.2
B1	7.3	7.2	114.1	68.7	68.5	99.1	19.6	19.3	102.1
C1	6.6	6.4	103.1	69.9	69.6	100.9	18.8	18.9	97.9
K1	6.5	6.0	101.6	69.9	69.5	100.9	20.3	19.4	105.7
O1	6.9	6.8	107.8	69.9	69.5	100.9	19.8	20.1	103.1
Q1	6.0	6.3	93.8	69.0	69.5	99.6	18.9	19.0	98.4
R1		6.4			69.9			17.1	
W1	7.0	7.0	109.4	69.2	69.3	99.8	18.9	18.5	98.4
X1	5.4	5.3	84.4	69.5	69.4	100.3	19.1	20.2	99.5
A2	7.4	7.1	115.6	69.1	68.9	99.7	20.2	20.5	105.2
G2	5.5	5.7	85.9	70.9	69.5	102.3	18.6	18.9	96.9
M2		6.3			68.0			20.3	
P2	6.2	6.2	96.9	69.2	69.9	99.8	18.3	18.7	95.3
Q2	6.6	6.6	103.1	69.9	69.9	100.9	17.0	17.7	88.5
S2	6.3	6.9	106.2	69.5	69.4	100.3	19.4	19.5	101.0
T2	6.1	6.2	95.3	69.8	70.0	100.7	19.4	19.9	101.0
W2	5.9	6.0	92.2	69.4	69.4	100.1	19.5	19.4	101.6
A3	6.2	6.3	96.9	69.0	69.3	99.6	17.8	18.1	92.7
H3	6.3	6.6	106.2	69.4	69.3	100.1	19.4	19.9	101.0
I3	5.1	6.0	95.3	69.3	69.2	100.0	19.2	19.6	100.0
O3	6.0	6.2	93.8	69.9	69.6	100.9	18.6	19.2	96.9
P3	5.8	6.3	90.6	70.0	69.4	101.0	19.7	19.3	102.6
T3	5.8	5.8	90.6	69.6	69.5	100.4	20.2	19.8	105.2
U3	6.2	6.0	96.9	68.3	68.3	98.6	19.8	20.2	103.1
V3	7.5	7.2	117.2	69.2	69.2	99.8	19.4	19.1	101.0
W3	6.3	6.4	98.4	69.3	69.3	100.0	18.5	19.1	96.4
X3	6.2	6.1	96.9	69.2	69.2	99.8	17.6	18.2	91.7
Y3	7.0	6.8	109.4	69.2	69.0	99.8	19.6	20.2	102.1
A4	5.7	5.7	89.1	69.3	69.4	100.0	18.7	18.6	97.4
O4		6.6			69.6			19.0	
R4	7.3	7.5	121.9	69.2	69.1	99.8	20.3	17.9	105.7
S4	6.9	6.9	107.8	68.9	69.0	99.4	17.9	18.0	93.2
FKBG	6.4	6.4	100.0	69.4	69.3	100.1	19.1	19.2	99.5

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE XIII (CONT)

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 69 LB KRAFT LINERBOARD

CODE	BURST		CD RING		CD STFI	
	CUR. AV.	PSIG CUM. AV.	IND. *B	CRUSH, LB CUM. AV.	IND. *B	LB/IN CUM. AV.
A1	148	145	103.5			
B1	130	129	90.9	128.0	104.4	34.1
C1	136	136	95.1	120.0	97.9	
K1	138	137	96.5	122.6		
O1	146	141	102.1	114.0	93.0	36.6
				112.5		29.8
Q1	147	140	102.8	152.0		34.4
R1		157		146.0		35.7
W1	155	149	108.4	123.5	100.7	
X1	144	138	100.7	125.0	102.0	
A2	139	144	97.2			26.4
				143.5	130.3	26.0
G2	161	150	112.6	159.8		31.6
M2		137		114.2		
P2	148	144	103.5			
Q2	153	164	107.0			29.0
S2	137	137	95.8			28.8
						26.9
T2	143	141	103.5	143.3	116.9	
W2	135	137	94.4			
A3	150	144	104.9	138.5	113.0	
H3	156	148	109.1	105.5		30.9
I3	149	140	104.2			30.8
						29.0
O3	140	134	97.9	111.0	90.5	
P3	136	140	95.1	106.0	86.5	
T3	145	146	101.4	106.0	86.5	25.5
U3	147	147	102.8	120.0	97.9	
V3	141	148	98.6			32.0
				120.5		33.9
						104.2
W3	146	142	102.1	132.2	107.8	
X3	154	154	107.7	114.0	93.0	30.6
Y3	144	140	100.7			32.7
A4	143	143	103.5			30.8
Q4		145				30.7
						31.0
						30.2
R4	147	162	102.8			31.8
S4	145	148	101.4	120.0	97.9	30.7
				116.1		32.0
FK3G	145	143	101.4	124.1	101.2	31.4
				122.6		30.7
						102.3

NOTE B IS GIVEN IN APPENDIX.

TABLE XIV

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 69 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	PERCENT CUM. AV.	IND. *B	LB/M SQ FT CUR. AV.	CUM. AV.	IND. *B	MIL CUR. AV.	CUM. AV.	IND. *B
A1	6.2	6.2	96.9	68.5	68.6	98.8	19.6	19.5	102.1
B1	7.3	7.2	114.1	68.7	68.6	99.1	19.5	19.4	101.6
C1	6.5	6.4	101.6	70.0	69.6	101.0	18.7	18.9	97.4
K1	6.1	6.0	95.3	69.5	69.6	100.3	19.2	19.6	100.0
O1	6.6	6.8	103.1	70.4	69.7	101.6	20.0	20.0	104.2
Q1	6.4	6.3	100.0	70.6	69.4	101.9	18.7	18.9	97.4
R1	6.7	6.3	104.7	70.0	69.9	101.0	17.4	16.8	90.6
W1	7.0	7.0	109.4	69.2	69.2	99.8	18.1	18.6	94.3
X1	5.6	5.3	87.5	69.5	69.4	100.3	19.2	20.0	100.0
A2	7.1	7.2	110.9	69.2	68.9	99.8	20.3	20.4	105.7
G2	5.6	5.7	87.5	69.5	69.7	100.3	19.1	18.9	99.5
M2	6.1	6.2	95.3	69.2	69.7	99.8	18.2	18.7	94.8
P2	5.9	6.7	92.2	70.4	69.8	101.6	17.3	17.5	90.1
G2	6.8	6.8	106.2	69.3	69.4	100.0	19.6	19.6	102.1
S2									
T2	6.1	6.2	95.3	69.8	69.9	100.7	19.2	19.8	100.0
W2	5.6	6.0	87.5	69.8	69.4	100.7	19.1	19.4	99.5
A3	6.4	6.3	100.0	68.9	69.2	99.4	18.2	18.0	94.8
M3	6.7	6.6	104.7	69.3	69.3	100.0	19.8	19.1	103.1
I3	6.2	6.1	96.9	69.1	69.1	99.7	20.0	19.6	104.2
O3	6.0	6.1	93.8	69.6	69.8	100.4	18.7	19.1	97.4
P3	5.7	6.2	89.1	70.5	69.5	101.7	19.8	19.4	103.1
T3	5.8	5.8	90.6	69.8	69.5	100.7	20.3	19.8	105.7
U3	6.0	6.0	93.8	68.2	68.3	98.4	20.2	20.2	105.2
V3	7.5	7.2	117.2	69.2	69.2	99.8	19.5	19.2	101.6
W3	6.4	6.4	100.0	69.3	69.3	100.0	18.6	19.0	96.9
X3	5.3	6.1	98.4	69.2	69.2	99.8	17.8	18.1	92.7
V3	6.9	6.9	107.8	69.2	69.0	99.8	19.5	19.9	101.6
A4	5.7	5.7	89.1	69.3	69.4	100.0	18.6	18.6	98.9
O4		6.6			69.5			19.0	
R4	7.4	7.6	115.6	69.1	69.2	99.7	19.9	18.5	103.6
S4	6.9	6.9	107.8	69.0	69.0	92.6	18.3	17.9	95.3
FK3G	6.4	6.4	100.0	69.4	69.3	100.1	19.1	19.2	99.5

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE XIV (CONT)

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1988 - 67 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST		IND. *B	CUR. AV.	CD RING CRUSH, LB		IND. *B	CUR. AV.	CD STFI LB/IN		IND. *B
		PSIG CUM. AV.	PSIG CUM. AV.			CUM. AV.	CUM. AV.			CUM. AV.	CUM. AV.	
A1	141	147	147	97.9	127.0	126.4	103.1	32.0	33.0	103.6		
91	131	129	91.0		119.0	132.0	96.6					
C1	147	136	102.1			126.3		27.7	45.5	89.6		
K1	139	138	96.5		118.0	113.7	95.8	29.2	29.1	94.5		
01	149	141	103.5									
A1	143	141	99.3		149.4	146.8	121.3	35.0				
R1	144	156	100.0		119.5	120.8	97.0					
M1	148	149	102.8		140.0	113.7	113.6	27.0	26.2	87.4		
X1	151	139	106.2									
A2	142	142	98.6									
G2	152	152	105.6		151.2	146.3	122.7	31.7				
M2	150	137				115.3		27.9	28.8	90.3		
P2	144	144	104.2									
Q2	147	162	102.1									
S2	133	136	95.8									
T2	144	143	100.0		154.4	140.1	125.3					
W2	139	137	96.5									
A3	146	145	101.4		133.0	134.1	103.0	29.5	30.9	95.5		
M3	155	150	107.6			106.0		31.3	27.6	102.9		
I3	146	141	101.4									
O3	135	135	93.8		115.0	116.3	93.3	32.0	33.4	103.6		
P3	140	140	97.2		108.0	109.1	87.7					
T3	152	145	105.6		105.0	107.5	85.2		25.8			
U3	155	147	108.3		123.0	121.3	99.8					
V3	147	146	102.1									
W3	144	142	100.0		133.5	132.7	108.4					
X3	153	155	106.2		115.0	112.4	93.3	31.0	30.2	100.3		
V3	133	139	95.8					33.0	31.4	106.8		
A4	151	145	104.9					30.6	31.1	99.0		
04		145						30.2				
R4	150	158	104.2		119.0	116.3	96.6	32.7	31.0	105.8		
S4	143	147	103.5					31.0	32.7	100.3		
FKG6	146	144	101.4		123.9	123.2	101.0	30.4	30.9	93.4		

NOTE 3 IS GIVEN IN APPENDIX.

TABLE XV

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 69 LG KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS			CALIPER		
	CUR. AV.	PERCENT CUM. AV.	IND. *B	LB/M SQ FT CUR. AV.	CUM. AV.	WT. *A IND. *B	MIL CUR. AV.	CUM. AV.	IND. *B
A1	7.7	6.2	120.3	68.6	68.6	99.0	18.7	19.6	97.9
a1	6.1	7.2	95.3	68.9	68.6	99.4	19.3	19.4	101.0
C1	6.2	6.5	96.9	70.2	69.7	101.3	18.6	18.8	97.4
K1	6.0	6.0			69.6			19.5	
01	6.5	6.8	101.6	70.4	69.8	101.6	20.2	20.0	105.8
a1	6.5	6.3	101.6	69.2	69.6	99.8	19.2	18.7	100.5
R1	6.9	7.0	107.8	69.3	69.2	100.0	18.7	18.5	97.9
W1	5.6	5.3	87.5	69.4	69.5	100.1	19.4	19.9	101.6
X1	7.0	7.2	109.4	69.2	69.0	99.8	19.6	20.4	102.6
A2	5.6	5.7	87.5	69.4	69.7	100.1	19.4	19.1	101.6
G2	6.2	6.2			67.9			20.1	
P2	5.7	6.2	89.1	69.2	69.6	99.8	18.0	18.6	94.2
Q2	6.5	6.5	101.6	70.0	69.9	101.0	18.6	17.4	97.4
S2	7.2	6.8	112.5	69.3	69.4	100.0	19.7	19.6	103.1
T2	6.2	6.2	96.9	69.9	69.9	100.9	19.2	19.6	100.5
W2	6.2	6.0	96.9	70.7	69.4	102.0	19.5	19.3	102.1
Z2	5.5		85.9	70.4		101.6	18.9		99.0
A3	6.4	6.3	100.0	69.2	69.2	99.8	18.1	18.1	94.8
H3	6.8	6.7	106.2	69.4	69.3	109.1	20.0	19.5	104.7
I3		6.2			69.2			19.6	
O3	5.9	6.1	92.2	69.8	69.7	100.7	18.5	19.0	96.8
P3	5.4	6.1	84.4	70.8	69.7	102.2	19.7	19.4	103.1
T3		5.8		69.6	69.6	100.4	20.1	19.9	105.2
U3	6.0	6.0	93.8	68.5	68.3	98.8	20.5	20.2	107.3
V3	7.6	7.2	118.8	69.2	69.2	99.8	19.6	19.4	102.6
W3	6.2	6.4	96.9	69.3	69.3	100.0	18.3	18.9	95.8
X3	6.3	6.2	98.4	69.2	69.2	99.8	18.0	18.1	94.2
Y3	7.0	6.9	109.4	69.1	69.0	99.7	19.5	19.9	102.1
A4	5.7	5.7	89.1	69.3	69.4	100.0	18.5	18.6	96.8
O4		6.6			69.6			19.0	
R4	7.0	7.5	109.4	69.2	69.1	99.8	17.4	18.8	91.1
S4	5.9	6.9	107.8	68.9	69.0	99.4	18.2	18.0	95.3
FK36	6.4	6.4	100.0	69.5	69.3	100.3	19.0	19.1	99.5

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE XV (CONT)

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 69 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST PSIG		IND. *B	CD RING CRUSH, LB		IND. *R	CD STFI LB/IN		IND. *B
		AV.	CUM. AV.		CUR. AV.	CUM. AV.		AV.	CUM. AV.	
A1	137	145	145	95.1	128.0	127.7	103.2	28.2	33.0	91.0
B1	133	129	129	92.4	112.5	127.3	90.7			
C1	136	138	138	94.4	130.5	130.5	99.2	33.3	29.3	107.4
K1	141	142	142	97.9	123.0	114.5	99.2			
O1	141	142	142	97.9	123.0	114.5	99.2			
Q1	146	142	142	101.4	152.0	148.8		34.1	35.0	110.0
R1	145	149	149	100.7	117.8	120.8	95.0			
W1	147	141	141	102.1	137.0	118.0	110.5			
X1	137	142	142	95.1				27.8	26.4	89.7
A2	153	153	153	109.7	148.1	147.8	119.4			
G2	153	138	138	106.2		113.9		23.0	28.6	90.3
M2	147	145	145	102.1						
P2	135	136	136	93.8						
S2	150	144	144	104.2	144.4	144.6	116.4			
T2	133	137	137	92.4	147.0		118.5			
W2	167	146	146	97.2	132.0	134.4	106.4			
Z2	140	152	152	105.6				30.1	30.8	97.1
A3	152	142	142	93.0	113.0	115.3	91.1			
H3	134	136	136	97.2	110.0	109.8	88.7			
I3	140	139	139	109.7	109.0	108.2	97.9			
O3	158	147	147	111.8	121.0	121.7	97.6			
P3	161	146	146	102.1	151.7	131.6	122.3	32.0	33.1	103.2
T3	147	142	142	102.1	116.0	112.4	93.5	31.2	30.2	100.6
U3	156	156	156	108.3				32.4	32.1	104.5
V3	133	139	139	92.4				31.4	31.0	101.3
W3	144	146	146	100.0						
X3	147	145	145	102.1						
Y3	147	157	157	102.1				31.9	31.3	102.9
A4	149	143	143	103.5	116.0	116.6	93.5	31.0	32.6	100.0
R4	146	144	144	101.4	126.6	124.0	102.1	31.0	31.0	100.0
S4	146	144	144	101.4	126.6	124.0	102.1	31.0	31.0	100.0

NOTE 9 IS GIVEN IN APPENDIX.

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	CUM. AV.	IND. *B
C1	7.0	7.0	104.5	90.8	90.8	100.3	25.4	25.1	102.4
O1	6.4	6.6	95.5	92.0	92.2	101.6	25.3	26.9	102.0
G2		5.7			90.6			25.1	
P2	6.3	6.3	94.0	89.3	90.7	98.7	24.2	24.3	97.6
S2	7.3	7.2	109.0	90.3	90.4	99.8	26.4	25.7	106.4
H3	6.3	6.9	101.5	90.7	90.5	100.2	25.5	23.9	102.8
O3	6.0	6.2	89.6	90.8	91.0	100.3	24.4	25.2	98.4
U3	8.4	8.2	125.4	89.7	90.0	99.1	27.0	26.7	108.9
V3	7.4	7.2	110.4	90.3	90.3	99.8	25.5	24.6	102.8
W3	6.7	6.7	100.0	90.4	90.8	99.9	25.2	25.6	101.6
X3	6.5	6.1	97.0	90.2	90.2	99.7	24.0	24.5	96.8
A4	6.0	6.1	89.6	90.4	90.2	99.9	24.2	24.3	97.6
R4		7.5			90.3			22.6	
S4		6.9			90.1			23.7	
FKBG	6.3	6.7	101.5	90.4	90.5	90.9	25.2	24.8	101.6

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE XVI (CONT)

AVERAGES OF MILL QUALITY DATA FOR JUL-AUG, 1988 - 90 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST PSIG		IND. +B	CD RING CRUSH, LB		IND. +B	CD STFI LB/IN		IND. +B
		CUM. AV.	IND. +B		CUR. AV.	CUM. AV.		CUR. AV.	CUM. AV.	
C1	152	154	88.4		149.0	164.8	93.0			
01	192	164	111.6			146.0				
G2		173				188.3				
P2	190	184	110.5					39.8	39.6	
S2	171	162	99.4						41.5	96.4
									33.9	
H3	170	165	98.8			140.5		41.1	39.6	99.5
03	171	162	99.4		163.0	164.7	101.7			
U3	187	180	108.7		137.0	145.6	85.5			
V3	171	180	99.4					41.0	44.3	99.3
W3	163	165	94.8		159.8	159.4	99.8			
X3	184	182	107.0		152.0	145.2	94.9	40.4	38.8	97.8
A4	175	167	101.7					41.9	44.1	101.4
R4		205							41.5	
S4		177				160.3			41.3	
FKB6	175	172	101.7		152.2	160.2	95.0	40.8	41.3	98.8

NOTE B IS GIVEN IN APPENDIX.

TABLE XVII

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1983 - 90 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. #A		CALIPER		IND. #B
	CUR. AV.	CUM. AV.	IND. #A	CUR. AV.	LB/M SQ FT CUM. AV.	CUR. AV.	MIL CUM. AV.	
C1	6.9	7.0	103.0	90.7	90.8	100.2	25.0	100.4
O1	6.3	6.5	94.0	91.6	92.1	101.2	25.4	102.0
X1	5.7	5.1	85.1	90.7	90.6	100.2	25.8	103.6
G2	5.8	5.7	86.6	90.9	90.6	100.4	26.0	104.4
P2	6.1	6.2	91.0	90.3	90.4	99.8	23.9	96.0
S2	7.3	7.1	109.0	90.2	90.4	99.7	25.7	103.2
H3	6.9	6.9	103.0	90.8	90.5	100.3	26.3	105.6
O3	5.9	6.1	88.0	91.0	91.1	100.6	24.8	99.6
U3	8.3	8.3	123.9	89.3	89.9	98.7	26.5	106.4
V3	7.5	7.3	113.4	90.4	90.3	99.9	25.0	100.4
W3	6.8	6.7	101.5	90.7	90.7	100.2	25.0	100.4
X3	6.4	6.2	95.5	90.2	90.2	99.7	23.8	95.6
A4	6.0	6.1	89.6	89.9	90.3	99.3	23.9	96.0
R4		7.5			90.3		22.6	
S4		6.9			90.0		23.7	
FK3G	5.6	6.7	98.5	90.5	90.5	100.0	25.2	101.2

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE XVII (CONT)

AVERAGES OF MILL QUALITY DATA FOR SEP-OCT, 1983 - 90 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST		IND. *B	CD RING CRUSH, LB			CD STFI LB/IN		
		CUM. AV.	PSIG		CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	CUM. AV.	IND. *B
C1	154	154	154	89.5	158.0	161.0	92.4			
O1	183	173	173	109.3		146.0				
X1	175	175		101.7	175.0		110.1			
G2	181	173	173	105.2	196.1	188.4	123.3	39.0	39.0	96.1
P2	201	184	184	116.9				39.6	41.5	
S2	180	163	163	104.6						
H3	175	165	165	101.7		141.0		39.9	39.5	96.8
O3	161	163	163	93.6	167.0	165.7	105.0			
U3	191	181	181	111.0	145.0	143.2	91.2	42.0	43.5	101.9
V3	160	179	179	93.0						
W3	168	165	165	97.7	179.6	159.5	113.0			
X3	180	184	184	104.6	149.0	145.0	93.7	39.8	38.7	96.6
A4	170	169	169	98.8				41.0	43.8	92.5
R4		205							41.5	
S4		175				160.7			41.4	
FK3G	176	172	172	102.3	167.1	159.0	105.1	40.5	41.2	98.3

NOTE 3 IS GIVEN IN APPENDIX.

TABLE XVIII

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 90 LB KRAFT LINERBOARD

CODE	MOISTURE CONTENT			ADJ. BASIS WT. *A			CALIPER		
	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	CUM. AV.	IND. *B	CUR. AV.	CUM. AV.	IND. *B
C1	3.9	7.0	132.8	88.9	90.9	98.2	25.2	25.1	100.8
O1	6.5	6.4	97.0	91.6	92.0	101.2	27.2	26.1	108.8
X1	5.5	5.7	82.1	90.5	90.7	100.0	26.0	25.8	104.0
G2	5.6	5.7	83.6	90.4	90.6	99.9	25.2	25.8	100.8
P2	6.1	6.3	91.0	90.3	90.2	99.8	23.8	24.2	95.2
S2	7.0	7.2	104.5	90.3	90.3	99.8	25.9	26.0	103.6
H3	6.8	7.0	101.5	91.0	90.6	100.6	27.1	25.3	108.4
O3	5.8	6.0	86.6	91.1	91.0	100.7	24.0	24.9	96.0
U3	8.4	8.5	125.4	90.6	89.9	100.1	27.4	26.9	109.6
V3	7.4	7.4	110.4	90.3	90.4	99.8	25.3	25.0	101.2
W3	6.7	6.7	100.0	90.6	90.7	100.1	24.6	25.4	98.4
X3	6.6	6.2	98.5	90.2	90.2	99.7	23.8	24.4	95.2
A4	6.0	6.1	89.6	90.4	90.2	99.9	24.1	24.2	96.4
R4		7.5			90.3			22.6	
S4		6.9			90.1			23.6	
FK33	6.7	6.7	100.0	90.5	90.5	100.0	25.4	25.0	101.6

NOTES A AND B ARE GIVEN IN APPENDIX.

TABLE XVIII (CONT)

AVERAGES OF MILL QUALITY DATA FOR NOV-DEC, 1988 - 90 LB KRAFT LINERBOARD

CODE	CUR. AV.	BURST		IND. *B	CD RING		IND. *B	CD STFT		IND. *B
		PSIG CUM.	AV.		CUR. AV.	CRUSH, LB CUM.		LB/IN CUM.	AV.	
C1	153	154	91.3	180.0	156.6	112.8				
01	182	177	105.2	152.0	146.0	95.3				
X1	169	175	97.7	180.0	175.0	112.8				
G2	193	174	114.4	203.8	189.8	127.8				
P2	194	185	112.1				40.6	38.9	41.0	99.0
S2	163	164	97.1							
H3	175	167	101.2				38.8	39.4		94.6
03	161	163	93.1	168.0	166.7	105.3				
U3	191	183	110.4	135.0	141.6	84.6				
V3	172	176	99.4				40.0	43.2		97.6
W3	163	163	97.1	164.0	158.5	102.8				
X3	191	184	110.4	153.0	145.3	95.9				
A4	165	169	95.4				40.9	38.8		99.3
R4		205					43.4	42.7		105.8
S4		174			161.3			41.5	41.5	
FKB6	176	173	101.7	167.0	159.5	104.7	40.7	41.0		99.3

NOTE B IS GIVEN IN APPENDIX.

Data submitted by the participating mills relative to conditioning and testing environments are summarized in Table XIX. The procedures used in calculating adjusted basis weight, cumulative machine averages, machine factors, machine indexes, and F.K.B.G. indexes are described in the Appendix.

It should be explained that the number of machines for which data are compiled in each table for a specified period varies for these reasons: a machine must have (a) produced at least 500 tons of the pertinent grade weight during the specified period, or (b) produced 500 tons of the pertinent grade weight during any one or more of the 12 months prior to the specified period (so that a cumulative average is available), to be included in a given table.

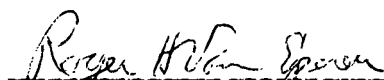
TABLE XIX

DATA ON CONDITIONING AND TESTING ENVIRONMENTS

JUL-AUG, SEP-OCT, NOV-DEC, 1988

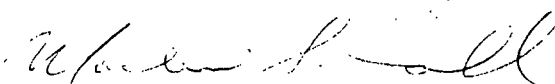
Code	Conditioning Environment			Testing Environment	
	Are Quality Samples Conditioned Before Testing?	Time	Procedure Temp., °F	Are Quality Samples Tested Under Controlled Conditions of Temperature & Humidity?	
A1	Yes	15 min	--	Yes:	73 ± 2°F; 50 ± 1% RH
B1	No	--	--	Yes	
C1	No	--	--	No	
F1	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
H1	No	--	--	Yes:	73°F; 50% RH
K1	No	--	--	No	
O1	No	--	--	Yes:	72 ± 3°F; 50 ± 2% RH
P1	No	--	--	Yes:	73 ± 3°F; 50 ± 3% RH
Q1	No	--	--	Yes:	73°F; 50% RH
R1	No	--	--	Yes:	73 ± 3.5°F; 50 ± 2% RH
W1	No	--	--	No	
X1	No	--	--	Yes:	72 ± 3°F; 50 ± 2% RH
Z1	No	--	--	Yes:	73 ± 3°F; 50 ± 2% RH
A2	No	--	--	No	
F2	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
G2	No	--	--	Yes:	73 ± 3°F; 50 ± 2% RH
K2	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
L2	Yes	10 min	--	Yes:	72 ± 2°F; 50 ± 2% RH
M2	No data submitted for this period.	--	--	Yes:	72 ± 3°F; 50 ± 2% RH
N2	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
P2	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
Q2	Yes	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
R2	No	--	--	No	
S2	No	--	--	Yes:	72 ± 5°F; 50 ± 5% RH
T2	No	--	--	Yes:	73 ± 3.5°F; 50 ± 2% RH
V2	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
W2	No	--	--	Yes:	72 ± 2°F; 50 ± 2% RH
X2	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
Y2	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
Z2	No	--	--	Yes:	73 ± 3°F; 50 ± 1% RH
A3	No	--	--	No	
B3	No	--	--	Yes:	72 ± 3°F; 50 ± 2% RH
C3	No	--	--	Yes:	72 ± 2°F; 50 ± 2% RH
H3	No	--	--	Yes:	73°F; 50% RH
I3	Yes	--	--	Yes:	72 ± 2°F; 50 ± 2% RH
J3	No	--	--	Yes:	70 ± 4°F; 50 ± 5% RH
K3	Yes	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
O3	Yes	10 min	--	Yes:	72 ± 2°F; 50 ± 2% RH
P3	No	--	--	No	
Q3	No	--	--	Yes:	70 ± 4°F; 50 ± 5% RH
S3	No	--	--	No	
T3	No	--	--	No	
U3	No	--	--	Yes:	70 ± 2°F; 50 ± 2% RH
V3	No	--	--	Yes:	73°F; 50% RH
W3	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
X3	No	--	--	Yes:	72 ± 2°F; 50 ± 1% RH
Y3	Yes	7 min	--	Yes:	73 ± 2°F; 50 ± 5% RH
A4	No	--	--	Yes:	70 ± 4°F; 50 ± 5% RH
E4	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
N4	No	--	--	Yes:	70 ± 2°F; 50 ± 2% RH
O4	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
Q4	No	--	--	No	
R4	No	--	--	No	
S4	No	--	--	Yes:	73 ± 2°F; 50 ± 2% RH
T4	No	--	--	Yes:	72 ± 5°F; 50 ± 5% RH

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APPENDIX

NOTES A AND B USED IN TABULATIONS OF MILL DATA

Notes A and B used in the tables of mill data are given below; these notes define the procedure used in calculating adjusted basis weight, machine index, and F.K.B.G. index. It should be stressed that each formula is applicable only to a specific physical property of a specific grade weight of linerboard.

Note A: Adjusted basis weight (ABW) = reported weight (RBW) adjusted to moisture content of 7.8%:

$$ABW = RBW \left[\frac{(100 - \text{reported moisture content, \%})}{(100 - 7.8)} \right]$$

$$\text{Note B: Machine index (\%)} = \left[\frac{\text{Current machine average}}{\text{Cumulative F.K.B.G. average}} \right] \cdot 100 \text{ where}$$

$$\text{Cumulative F.K.B.G. average} = \sum \frac{\text{CFKBGA's}^b \text{ for previous 6 periods excluding CFKBGA for current period}}{6}$$

$$\text{F.K.B.G. index (\%)} = \left[\frac{\text{Current F.K.B.G. average}}{\text{Cumulative F.K.B.G. average}} \right] \cdot 100 \text{ where}$$

$$\text{Current F.K.B.G. average} = \sum \frac{\text{CMA's}^a \text{ for current period for all machines}}{\text{Number of machines}}$$

^aCMA = current machine average for a specific physical property of a specific linerboard grade weight obtained during a given period on a specific machine.

^bCFKBGA = current F.K.B.G. average for a specific physical property of a specific linerboard grade weight obtained during a given period.

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